

1/Man. 2/Economic survey board
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The Honourable John Bracken,
Premier of Manitoba.

Sir,

I have the honour to submit herewith a report
on Employment in Manitoba, being Project No.5 under
the Economic Survey, and sixth in a series of reports
covering many phases of the economic and social life
of the province.

I have the honour to be,

Sir,

Your obedient servant,

C.B. Davidson,
Director

Winnipeg, Manitoba.
May 11, 1938

EMPLOYMENT IN MANITOBA

- by -

C.B.Davidson

ACKNOWLEDGMENTS

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PART I

EMPLOYMENT IN MANITOBA

INTRODUCTION

In the report of the Economic Survey Board entitled "The Population of Manitoba" an analysis was made of the growth of the population of the province as agricultural and urban development took place. This study further dealt with the age distribution, the geographical distribution and the racial distribution of the people of the province.

In the second report of the Board entitled "Education in Manitoba" a complete analysis was made of school population and problems associated with education in the province.

The present study seeks to deal with the adult population of Manitoba from the employment standpoint. In other words we now seek to show the manner in which the adult population of the province makes its living.

It is axiomatic that employment in Manitoba reflects the development of the province and therefore, the extent and distribution of employment in Manitoba may be broadly defined by the range of industries within the province and by the degree of urban development which has taken place. Behind the economic development of Manitoba lies the growth in agriculture, both in the province of Manitoba and in the prairie provinces. Agriculture in Manitoba provides the largest field of employment of any industry within the province. The operation of 55,000 farms, with their many agricultural interests, naturally provides a large field for human endeavor. Similarly the other natural industries of Manitoba, such as mining, fishing,

trapping and forestry all provide their share of employment in the province, although the numbers of people so occupied are not large in relation to the total employment offered in the province. The employment situation in Manitoba has been further affected by the growth of urban communities, and especially by the growth of the city of Winnipeg and suburban municipalities.

The larger urban communities in Manitoba, and especially Greater Winnipeg, fulfill economic functions far beyond the borders of the province and therefore provide avenues of employment which would never exist if urban activities and interests in Manitoba were confined to the province alone. For this reason within the province of Manitoba have been created employment opportunities in urban centres based upon, not only the economic progress of Manitoba, but also that of western Canada and, to a certain extent, that of western Ontario.

It is characteristic of large urban centres that the range of employment is extremely diverse and in the urban development in Manitoba is found all types of employment generally associated with urban communities. It is a fact, therefore, that the range of employment available in Manitoba is considerably wider than that of any other prairie province.

It cannot be said that industrial development in Manitoba has proceeded without encountering major difficulties. The rapid expansion of western Canada was a great factor in building up urban development in Manitoba, and with the days of pioneer settlement on a major scale now passed, it is more difficult for urban communities in Manitoba to maintain their accustomed rate of progress. In addition the development of employment in Manitoba has been

affected in a material way by the change of distribution within Canada which resulted from the opening of the Panama Canal and the building up of the Pacific Coast as a distributing centre. Another problem which has affected employment in Manitoba has been the fact that Winnipeg was the centre of railroads in the days when new lines were being built in all parts of western Canada. The completion of western Canada's railway system to the point where requirements were fairly well satisfied has meant that railroad construction has ceased to be an employer of labor, and employment in railway transportation is now limited to the operation and maintenance of railroads. These are all developments which have affected the employment situation in Manitoba, and bear upon present difficulties being experienced within the province.

URBAN AND RURAL DEVELOPMENT

The employment position in Manitoba is profoundly affected by the degree of urban development which has taken place. With 44 per cent of the total population in Manitoba now resident in urban centres, and with approximately 40 per cent of the entire population of Manitoba resident in Greater Winnipeg, the question of the relationship between this urban development and its surrounding agricultural development is important.

It is too often lost sight of that urban development in Manitoba has been built up on services rendered far beyond the borders of the province, and, therefore, that development has been a fortunate one for the province as a whole. From the standpoint of employment the relation between urban communities and the surrounding rural areas is

exceedingly important. In any community there is a constant movement of people from country to city, and to a lesser extent, from city to country. From the standpoint of Manitoba as a whole the existence of urban centres of some magnitude is decidedly advantageous. Limitations in respect to the amount of arable land, and the human factor, wherein all farm children and young people do not desire agricultural pursuits, render it important that diversified employment opportunities are available in urban centres. Urban opportunities in Manitoba perform a highly important function in respect to rural areas, in that they provide an outlet and economic opportunity for that part of the agricultural population which desires to seek opportunities other than in agriculture. Urban centres are important in agricultural areas in diversifying employment and opportunity.

THE BASIS OF EMPLOYMENT

The basis of employment within the province varies considerably. The main demarcation is found as between those who are working for their own account and those who are working for salary or wages.

Agriculture, generally, is an independent occupation, with the farmer not in receipt of a fixed remuneration, his income being dependent upon production, prices and many other factors which are involved in the operation of a farm. The farmer has his counterpart in urban centres in the business man, or other person who is working for his own account and who depends upon the success of his business or personal effort for the remuneration which he receives for his

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services. As against this type of employment in Manitoba there is a larger class of people who work for salary or wages; people who, if they are at work, are working at a fixed income. The relationship between these types of employment will be dealt with in this study.

DEFINITION OF TERMS

In approaching an analysis of the number and distribution of those gainfully occupied, or the wage-earners in Manitoba, it is necessary to have clearly in mind the meaning of the terms used:

"A "gainfully occupied" person is one who is working for a wage, or wage equivalent, or a salary, or working for his own account without a fixed income.

A "wage-earner" is one who is working for a fixed income in the form of a wage, or a salary.

The gainfully occupied group, therefore, includes the wage-earning group and is larger than the wage-earning group by the number of those who do not receive a fixed remuneration, such as in the case of farmers or those who depend upon the success of their business or their personal effort to secure a livelihood.

It must also be remembered that in connection with our discussion of those gainfully occupied, and the wage-earners in Manitoba, no distinction is made between those who are employed and those who are unemployed. In other words, the statistics of gainfully occupied and wage-earners include those who are not at work. In our study of unemployment those not at work will be deducted from the number of gainfully occupied and the number of wage earners, and treated separately. The present analysis, therefore, deals with gainfully occupied and wage-earners who have an usual occupation within the

province whether or not they are at the moment actually engaged in that occupation.

EMPLOYMENT IN CANADA AND MANITOBA

Table 1 shows that in 1931 Canada had a population of 10,362,833. Of this number 8,159,059 were 10 years of age and over and would be described as the potential "working" population in accordance with the basis used in 1931. Of the 8,159,059 people 10 years of age and over 3,927,230 were gainfully occupied, or 37.90 per cent of the total population, and 48.13 per cent of the population 10 years of age and over.

In 1931 Manitoba had a total population of 700,139 of which 557,806 were 10 years of age and over. Of this number 270,672 were gainfully occupied, or 38.66 per cent of the total population and 48.52 per cent of the population 10 years of age and over.

The statistics so far quoted refer to total population and since there is a difference between the number of males and the number of females who normally find themselves in gainful occupations, the analysis should be carried one step further in order to make a distinction between the sexes.

In 1931 Canada had a male population of 5,366,502 of which 4,252,537 were 10 years of age and over. Of this number 3,261,371 were gainfully occupied, or 60.77 per cent of the total population and 76.69 per cent of the population 10 years of age and over.

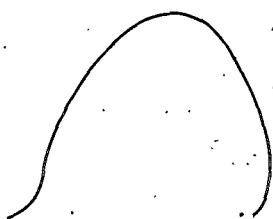
In the same year Manitoba had a male population of 368,065 of which 296,095 were 10 years of age and over. Of this number 225,764 were gainfully occupied, or 61.34 per cent of the total

6. A.

TABLE 1. NUMBER AND PER CENT OF THE POPULATION, CLASSIFIED
ACCORDING TO SEX, IN GAINFUL OCCUPATIONS, FOR
CANADA AND THE PROVINCES—1931.

	TOTAL POPULATION			POPULATION 10 YEARS AND OVER			GAINFULLY OCCUPIED			PER CENT OF TOTAL POPULATION			PER CENT OF POPULATION 10 YEARS AND OVER		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Canada	10,362,833	5,366,502	4,996,331	8,159,059	4,252,537	3,906,522	3,927,230	3,261,371	665,859	37.90	60.77	13.33	48.13	76.69	17.04
Prince Edward Island	88,038	45,392	42,646	69,333	35,907	33,426	32,166	27,818	4,348	36.54	61.28	10.20	46.39	77.47	13.01
Nova Scotia	512,846	263,104	249,742	402,401	207,098	195,303	181,087	153,151	27,936	35.31	58.21	11.19	45.00	73.95	14.30
New Brunswick	408,219	208,620	199,599	310,316	159,102	151,214	140,005	117,933	22,072	34.30	56.53	11.06	45.12	74.12	14.60
Quebec	2,874,255	1,447,124	1,427,131	2,167,517	1,091,418	1,076,099	1,025,709	823,287	202,422	35.69	56.89	14.18	47.32	75.43	18.81
Ontario	3,431,683	1,748,844	1,682,839	2,791,072	1,423,989	1,367,083	1,346,214	1,096,726	249,488	39.23	62.71	14.83	48.23	77.02	18.25
Manitoba	700,139	368,065	332,074	557,806	296,095	261,711	270,672	225,764	44,908	38.66	61.34	13.52	48.52	76.25	17.16
Saskatchewan	921,785	499,935	421,850	705,350	390,105	315,245	338,911	301,435	37,476	36.77	60.29	8.88	48.05	77.27	11.89
Alberta	731,605	400,199	331,406	572,129	319,840	252,289	286,203	252,742	33,461	39.12	63.15	10.10	50.02	79.02	13.26
British Columbia	694,263	385,219	309,044	583,135	328,983	254,152	306,263	262,515	43,748	44.11	68.15	14.16	52.52	79.80	17.21

SOURCE: Census of Canada, 1931.



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population and 76.25 per cent of population 10 years of age and over.

It will be noted that the distribution of those gainfully occupied in Manitoba and Canada, in relation to total population and population 10 years of age and over was very similar.

In 1931 Canada had a female population of 4,996,331 of which 3,906,522 were 10 years of age and over. Of this number 665,859 were gainfully occupied, or 13.33 per cent of total population and 17.04 per cent of total female population 10 years of age and over. In the same year Manitoba had a total female population of 332,074 of which 261,711 were 10 years of age and over. Of this number 44,908 were gainfully occupied, which number constituted 13.52 per cent of the total female population and 17.16 per cent of total female population 10 years of age and over.

It is apparent from the above figures that the general distribution of gainfully occupied in relation to total population and total population 10 years of age and over is very similar for Manitoba and Canada. It is interesting to note that the percentage of females gainfully occupied in the other two prairie provinces, namely, Saskatchewan and Alberta, is substantially lower than in Manitoba and in Canada as a whole.

GAINFULLY OCCUPIED BY AGE GROUPS IN CANADA AND IN MANITOBA

The following table shows the percentage of gainfully occupied in Canada and in Manitoba in percentage of total population, by ages:

TABLE 2

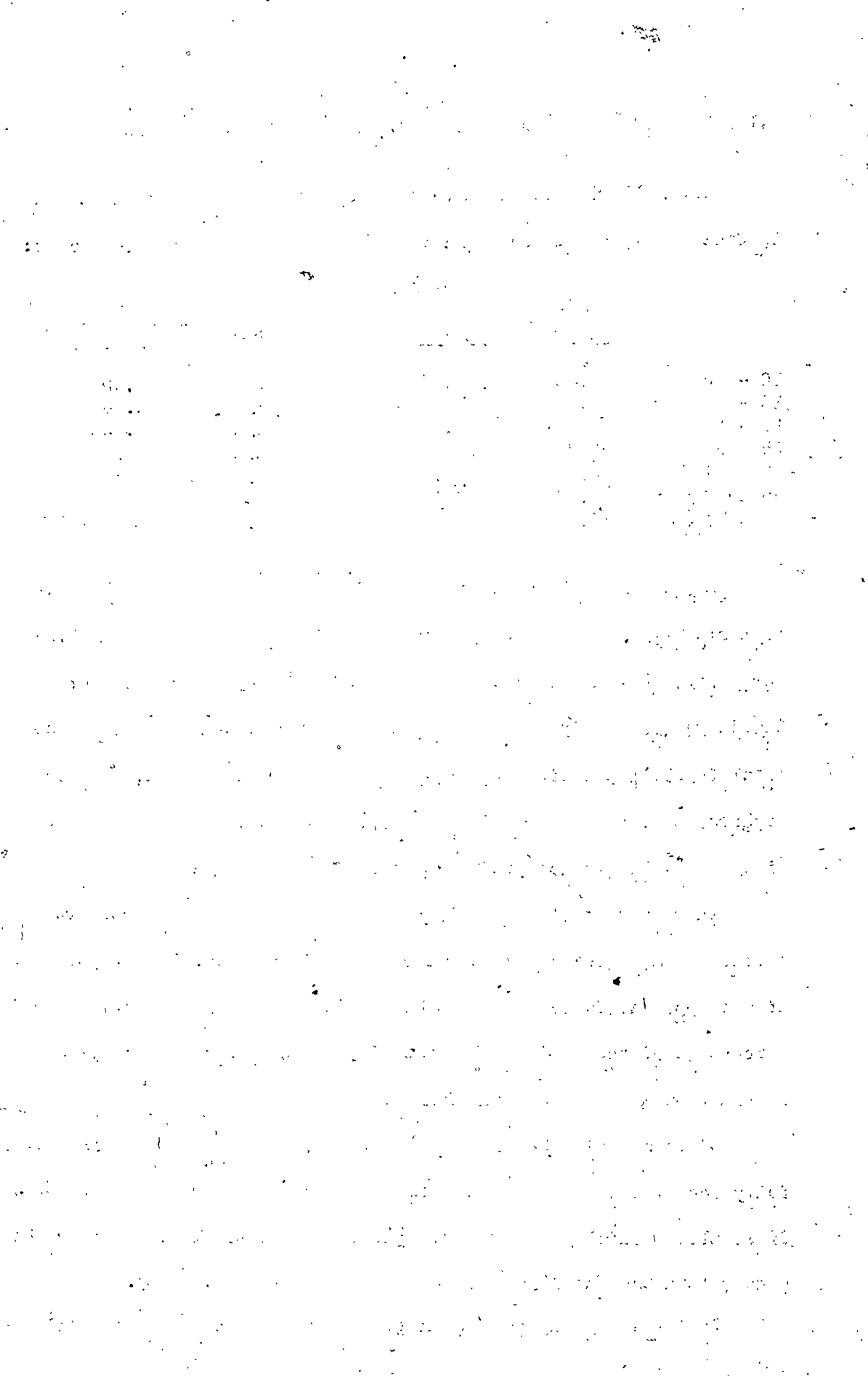
	<u>Canada</u>		<u>Manitoba</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
10 - 15	6.82	1.37	5.99	.90
16 - 19	67.46	30.33	65.06	28.40
20 - 24	92.64	42.36	92.40	45.25
25 - 34	97.73	21.73	97.73	21.92
35 - 64	95.87	11.99	96.45	11.17
65 and over	55.72	6.17	55.20	5.55
Total	76.69	17.04	76.25	17.16

As shown in the above table 76.69 per cent of the male population of Canada was gainfully occupied in 1931 as compared with 76.25 per cent in Manitoba. 17.04 per cent of the female population of Canada was gainfully occupied in 1931, whereas 17.16 per cent of the total female population in Manitoba was gainfully occupied. These figures show that there is little difference between the percentage of those gainfully occupied in Canada and in Manitoba.

In respect to the individual age groups some differences are noted. In Manitoba a smaller percentage of children 10 to 15 years of age was gainfully occupied than in Canada as a whole; also a smaller percentage of those 16 to 19 years of age was gainfully occupied in Manitoba as compared with Canada.

Of those males 20 to 24 years of age, 92.64 per cent were gainfully occupied in Canada as compared with 92.40 per cent in Manitoba. Of Females gainfully occupied the percentage in Manitoba was slightly higher than the Canadian percentage for the same age group.

In the age group from 25 to 65 and over there was little differ-



ence between the percentages gainfully occupied in Manitoba and in Canada as a whole. It may be taken therefore that according to the statistics recorded in 1931 the numbers of those gainfully occupied by age groups followed the same general pattern for Manitoba as for Canada as a whole, with a somewhat smaller percentage in Manitoba in respect to the younger age groups.

GAINFULLY OCCUPIED IN RELATION TO TOTAL POPULATION

Table 3 below shows the population of Manitoba in 1931 and 1936 along with the number of gainfully occupied each year.

TABLE 3

<u>1931</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>
Population	700,139	368,065	332,074
Gainfully occupied	270,672	225,764	44,908 (1)
Per cent	38.66	61.34	13.52
<u>1936</u>			
Population	711,216	368,530	342,636
Gainfully occupied	269,320	224,009	45,811
Per cent	37.95	60.79	13.37

In 1931 Manitoba had a population of 700,139 of which number 270,672 were gainfully occupied, or 38.66 per cent. In the same year the male population of Manitoba was 368,065 and of this number 225,764 were gainfully occupied, or 61.34 per cent of the total male population. In the same year the female population of Manitoba was 332,074 and of this number 44,908, or 13.52 per cent were gainfully occupied.

(1) In Census Statistics "housewives" are not considered as gainfully occupied.

In 1936 the population of Manitoba was 711,216 and of this number 269,820, or 37.95 per cent were gainfully occupied. The male population amounted to 363,580 and of this number 224,009, or 60.79 per cent were gainfully occupied. Out of a female population of 342,636, 45,811 or 13.37 per cent were gainfully occupied in 1936.

Significant changes have taken place in respect to total population and gainfully occupied in Manitoba between 1931 and 1936. In spite of the fact that the population of the province increased from 700,139 in 1931 to 711,216 in 1936 there was a slight decline in the number gainfully occupied between the two years.

Between 1931 and 1936 there was very little change in the male population of the province and the number of gainfully occupied declined slightly over 1,700. Between the same two years the female population of the province increased by over 10,000, and the number of gainfully occupied females increased by slightly less than 1,000.

A further analysis of the gainfully occupied by ages in 1931 and 1936 for the province of Manitoba is shown in the following table:

TABLE 4

	<u>All Ages</u>		<u>14-17 Yrs</u>		<u>13-19 Yrs</u>		<u>20-24 Yrs</u>	
	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>
Manitoba		(1)		(2)				
Males	225,764	224,009	11,052	9,361	11,881	9,530	30,204	29,917
Females	44,908	45,811	3,178	2,291	5,998	4,545	14,331	14,624
	<u>25-34 Yrs</u>		<u>35-44 Yrs</u>		<u>45-54 Yrs</u>		<u>55-64 Yrs</u>	
	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>
Males	50,876	51,561	49,098	43,803	41,622	44,253	21,459	26,062
Females	10,174	13,039	5,047	4,993	3,571	3,562	1,817	1,966

(1) Note: 1936 totals include persons whose age was 'not stated'

(2) Includes a few 10-13 years of age.

Table 4 - cont'd.

<u>Manitoba</u>	<u>65-69 Years</u>		<u>70 Years and Over</u>	
	<u>1931</u>	<u>1936</u>	<u>1931</u>	<u>1936</u>
Males	5,854	6,046	3,718	3,357
Females	466	461	326	314

Table 4 shows that there were over 6,000 fewer gainfully occupied young people under 20 years of age in Manitoba in 1936 than in 1931. A sharp contraction is also noted in the number of gainfully occupied males between 35 and 44 years of age as between 1931 and 1936, along with a substantial increase in the number of gainfully occupied males over 45 years of age.

GAINFULLY OCCUPIED IN RELATION TO POPULATION AT WORKING AGES

Table 5 shows the population of Manitoba between the ages of 15 and 64, along with the gainfully occupied in 1931 and 1936:

TABLE 5

<u>1931</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>
Population 15 to 64	449,572	239,707	209,865
* Gainfully occupied	270,672	225,764	44,908
Per cent	60.21	94.18	21.40
<u>1936</u>			
Population 15 to 64	469,792	244,877	224,915
* Gainfully occupied	269,820	224,009	45,811
Per cent	57.45	91.51	20.37

According to Table 5 in 1931 the total population of Manitoba, between the ages of 15 and 64, was 449,572, and of this number 270,672 or 60.21 per cent were gainfully occupied. In the same year the male population between 15 and 64 years of age was 239,707, and

* These figures are the gainfully occupied of all ages

1931 figures include gainfully occupied 10-14 years of age and gainfully occupied over 64 years.

* 1936 figures include gainfully occupied 14 years of age, and over 64 years of age.

of this number 225,764, or 94.18 per cent were gainfully occupied. The female population between 15 and 64 years of age numbered 209,365, and of this number 44,908, or 21.40 per cent were gainfully occupied.

In 1936 the total population of working ages of Manitoba numbered 469,792 and of this number 269,820 were gainfully occupied, or 57.45 per cent. It will be noted in this connection that while the population of Manitoba increased by only 11,077 between 1931 and 1936 the population of working ages, that is, those between 15 and 64 years of age, increased by 20,220.

In 1936 the male population 15 to 64 years of age of Manitoba numbered 244,877 of which number 224,009, or 91.51 per cent, were gainfully occupied. In this instance it may be noted that while there was little change in the male population of Manitoba between 1931 and 1936, there was an actual increase of over 5,000 in the male population with ages ranging from 15 to 64. The female population of Manitoba within the 15 to 64 age group numbered 224,915 in 1936, and of this number 45,811, or 20.37 per cent, were gainfully occupied. It is important to note that while the female population of Manitoba increased by 10,562 between 1931 and 1936 the population of working ages increased by 15,080.

It will be noted from Tables 3 and 5 that the percentage of gainfully occupied in relation to total population, or in relation to the population of working ages declined between 1931 and 1936.

GAINFULLY OCCUPIED IN THE PROVINCE OF MANITOBA (BY INDUSTRIES)

Statistics have already been presented showing the number of gainfully occupied people in Manitoba in 1931 at 270,672 and the number gainfully occupied in 1936 at 269,820. With these general

figures in mind we will pass on to an analysis of the number gainfully occupied by industries.

Table 6 shows gainfully occupied in Manitoba by industries in 1931 and 1936 along with the increase and decrease.

AGRICULTURE

Agriculture provides gainful occupation for more people in Manitoba than any other industry. In 1931, 93,259 people were gainfully occupied in agriculture and by 1936 this number had increased to 101,407, an increase of 8,148. This increase in those gainfully occupied in agriculture is due to an increase in the number of farms, the natural increase in farm population and probably, to a lesser extent, to a movement of people from urban to rural areas.

SERVICE

In Manitoba 53,196 persons were gainfully occupied in service and service industries in 1931 as compared with 57,294 in 1936, an increase of 4,098 in the latter year as compared with the former. Females gainfully occupied in service and service industries slightly exceed the number of males so occupied and the increase between 1931 and 1936 affected both males and females in about their proportion to their association with the industry.

TRADE

Those gainfully occupied in trade in Manitoba in 1931 numbered 31,227 as compared with 32,306 in 1936. In this industry there was an increase of 1,079 in those gainfully occupied as between 1931 and 1936, males outnumbering females in trade in about the proportion of 3 to 1 and the increase in the number of gainfully occupied was due to the increase of males. As a matter of fact, there was a

TABLE - 6 -

GAINFULLY OCCUPIED BY INDUSTRY GROUPS, FOR MANITOBA, 1931-1936.

INDUSTRIES	1931			1936			Increase or Decrease		
	TOTAL		FEMALE	TOTAL		FEMALE	TOTAL		FEMALE
	MALE			MALE			MALE		
All Industries	270,670	225,744	44,926	269,819	224,007	45,812	- 851	- 1,737	+ 886
Agriculture	93,259	91,379	1,880	101,407	99,576	1,831	+ 8,148	+ 8,197	- 49
Service	53,196	25,213	27,983	57,294	27,151	30,143	+ 4,098	+ 1,938	+ 2,160
Trade	31,227	23,348	7,879	32,306	24,770	7,536	+ 1,079	+ 1,422	- 343
Manufacturing	36,424	23,218	3,206	24,688	21,534	3,154	- 1,736	- 1,684	- 52
Transportation and Communication	23,781	22,291	1,490	23,018	21,786	1,232	- 763	- 505	- 258
Construction	15,812	15,687	125	10,643	10,588	55	- 5,169	- 5,099	- 70
Unspecified	11,905	11,673	232	4,309	4,252	57	- 7,596	- 7,421	- 175
Finance and Insurance	6,859	4,870	1,989	5,732	4,108	1,624	- 1,127	- 762	- 365
Forestry, Fishing and Trapping	4,705	4,647	58	6,182	6,101	81	+ 1,477	+ 1,454	+ 23
Mining, Quarrying, Oil and Salt Wells	2,134	2,122	12	3,214	3,181	33	+ 1,080	+ 1,059	+ 21
Electric Light and Power	1,368	1,296	72	1,026	960	66	- 342	- 336	- 6

SOURCE: Census of Canada, 1931, Bulletin 36.
1936 - Dominion Bureau of Statistics, Ottawa.

decline of 343 in the number of females gainfully occupied in trade in Manitoba as between 1931 and 1936.

MANUFACTURING

In the manufacturing industries 26,424 persons were gainfully occupied in 1931 as compared with 24,688 in 1936, a decline of 1,736 between the two years. In the case of manufacturing the decline in those gainfully occupied affected males principally, the decline in the number of gainfully occupied females being only 52 out of the total decline of 1,736.

TRANSPORTATION AND COMMUNICATION

In 1931, 23,781 people were gainfully occupied in transportation and communication as compared with 23,018 in 1936. A contraction of 763 is noted between the two years. Employment in transportation and communication is largely male.

CONSTRUCTION

In 1931, 15,812 people were gainfully occupied in Manitoba in construction industries. By 1936 a sharp reduction had taken place in the numbers gainfully occupied in this industry, a reduction of over 5,000.

UNSPECIFIED

Under this heading 11,905 persons were gainfully occupied in 1931 as compared with 4,309 in 1936, a decline of 7,596 persons between the two years mentioned. This group of workers cannot be assigned to any one industry and constitute in the main the casual labour supply of the province. Within this classification are many unskilled workers, and many who have not a firm attachment to any one city or province.

FINANCE AND INSURANCE

In finance and insurance a reduction of 1,127 in the numbers of those gainfully occupied took place between 1931 and 1936. The decline in this instance affected both male and female employees.

FORESTRY, FISHING AND TRAPPING

In forestry, fishing and trapping, 4,705 persons were gainfully occupied in 1931 as compared with 6,182 in 1936; thus, there was an increase of 1,477 in the gainfully occupied in these industries between 1931 and 1936.

MINING, QUARRYING, OIL AND SALT WELLS

Those gainfully occupied in mining, quarrying, oil and salt industries in 1931 numbered 2,134 in 1931 as compared with 3,214 in 1936, an increase of 1,080 between the two years.

ELECTRIC LIGHT AND POWER

In electric light and power industries gainfully occupied persons in 1931 numbered 1,368 as compared with 1,026 in 1936, a decline of 342 between the years 1931 and 1936.

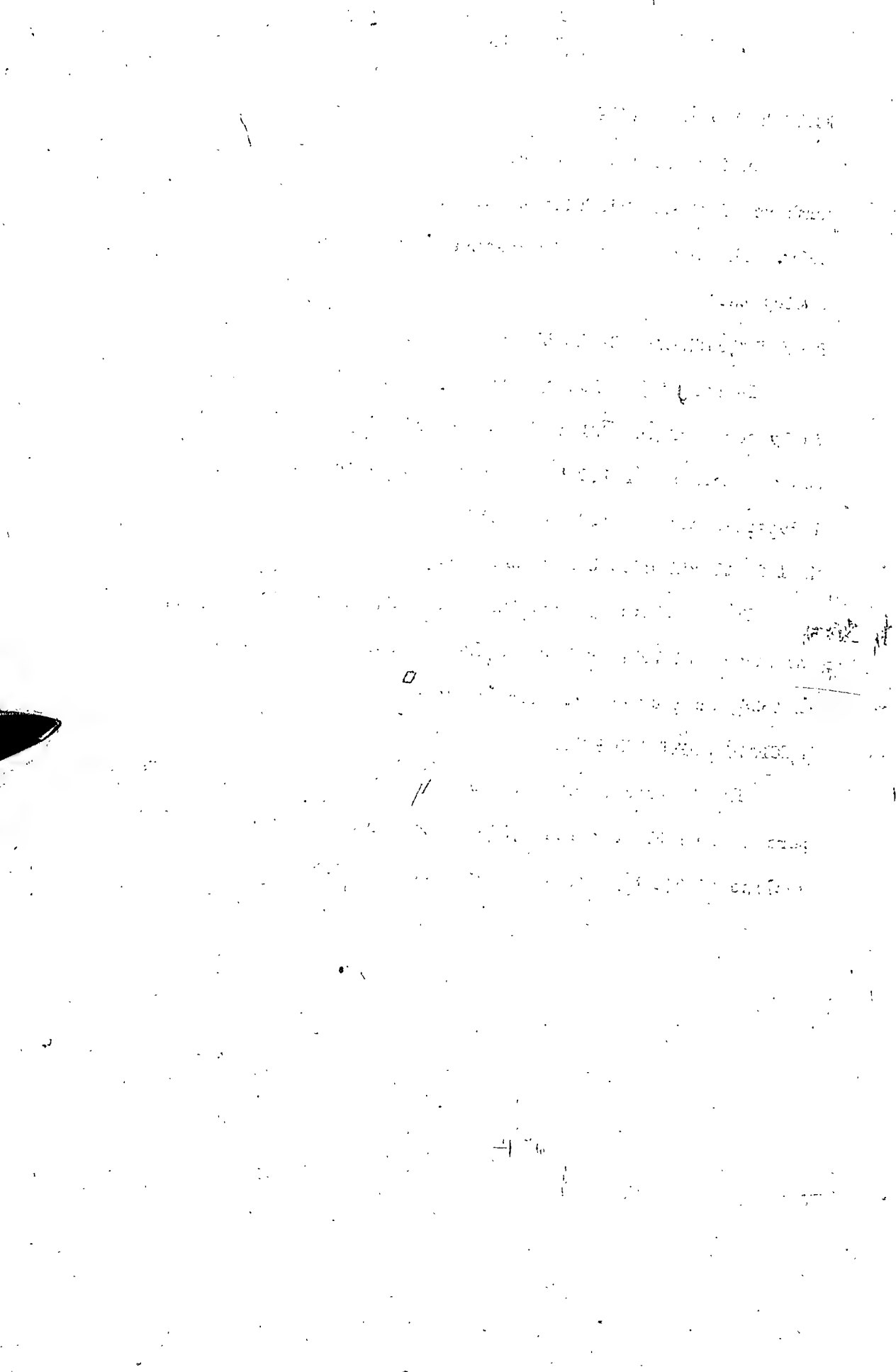


TABLE 7

Number of Wage-Earners in Canada and Each of
the Provinces, 1931

The following table shows the distribution of wage-earners in Canada by provinces:

	Total Wage Earners	Per Cent	Male	Per Cent	Female	Population Distri- bution 10 years and over		
						Per Cent	Male	Female
Canada	2,570,097	100	2,022,260	100	547,837	100	100	100
Prince Edward Island	12,344	.49	9,159	.45	3,185	.58	.84	.86
Nova Scotia	117,781	4.58	95,244	4.71	22,537	4.11	4.87	5.0
New Brunswick	84,232	3.28	66,310	3.28	17,922	3.27	3.74	3.87
Quebec	696,339	27.09	535,203	26.47	161,136	29.41	25.67	27.55
Ontario	965,607	37.57	752,851	37.23	212,756	38.84	33.49	34.98
Manitoba	170,739	6.64	132,883	6.57	37,856	6.92	6.96	6.70
Saskatch- ewan	145,568	5.66	116,157	5.74	29,411	5.37	9.17	8.07
Alberta	142,421	5.54	116,005	5.74	26,416	4.82	7.52	6.46
British Columbia	235,066	9.15	198,448	9.81	36,618	6.68	7.74	6.51

It will be noted from the above that there is a close relationship in Manitoba between the percentage of wage-earners and the percentage of population. Ontario, and to a lesser extent, Quebec, have a higher percentage of wage-earners than population 10 years of age and over, reflecting the conditions of Canadian industry in those provinces.

British Columbia also shows a high percentage of wage-earners as compared with population.

WAGE-EARNERS IN MANITOBA 1931 -1936

The following table shows the number of male wage-earners in Manitoba in 1931 and 1936 as compared with the number of those gainfully occupied:

	<u>TABLE 8</u>		
<u>Males</u>	<u>1931</u>	<u>1936</u>	<u>Increase or Decrease</u>
Gainfully occupied	225,764	224,009	- 1,755
Wage-earners	132,883	119,939	-12,944

It will be noted from the above table that of the 225,764 people who were gainfully occupied in Manitoba in 1931, 132,883 were wage earners who constituted 58.8 per cent of the total number gainfully occupied.

In 1936 wage earners numbered 119,939 or 53.5 per cent of the total number of gainfully occupied, namely, 224,009. It is apparent, therefore, that in Manitoba slightly over half of those gainfully occupied are employed at a salary or wage and the balance are all working for their own account, or for no pay, farmers and farmer's sons constituting a large part of the latter group.

It will be noted from the above table that the percentage of wage-earners has declined since 1931, this being due to an increase in the numbers of those working for their own account, and largely due to an increase in the number gainfully occupied in agriculture along with, of course, a positive decline in the numbers of wage-earners in the larger urban centres.

The following table shows the number of females gainfully occupied in Manitoba in 1931 and 1936, along with the number of female wage-earners for the same years:

TABLE 9

<u>Females</u>	<u>1931</u>	<u>1936</u>	<u>Increase or Decrease</u>
Gainfully occupied	44,908	45,811	/ 903
Wage-earners	37,856	38,468	/ 612

It will be noted that there has been little change in the number of females gainfully occupied in Manitoba between the two years compared, and similarly there has been little change in the number of wage-earners.

The number of females gainfully occupied and female wage-earners has not reflected the trend of female population in Manitoba which increased substantially during the five years from 1931 to 1936.

WAGE-EARNERS BY INDUSTRY

Table 10 shows wage-earners in Manitoba by industries in 1931 and 1936. The following points should be noted:

1. The number of wage-earners in all industries in Manitoba decreased by over 12,000 between 1931 and 1936.
2. This decrease is due in part to a considerable number of wage-earners becoming workers on their own account during the depression years. For instance, those gainfully occupied in agriculture in Manitoba increased by over 8,000 between 1931 and 1936 and no doubt included many people who were formerly wage-earners.
3. The number of wage-earners in service or service industries increased noticeably between 1931 and 1936; the large part of the increase being in the female employment.
4. Wage earners employed in manufacturing in Manitoba decreased by over 1,800 between 1931 and 1936; this decline affected male wage-earners mainly.
5. In trade there was a slight increase in the number of wage-earners from 1931 to 1936, mainly among male wage-earners.
6. The number of those employed as wage-earners in transportation declined by slightly over 1,000 between 1931 and 1936.

TABLE 10

WAGE-EARNERS BY INDUSTRIES - MANITOBA

	1931		1936		Increase or Decrease	
	Total	Male	Female	Total	Male	Female
All industries	170,739	132,883	37,856	158,407	119,939	38,468
Service	42,306	19,221	23,085	45,227	20,111	25,116
Manufacturing	25,427	22,248	3,179	23,542	20,428	3,114
Trade	24,497	16,982	7,515	24,966	17,870	7,096
Transportation	22,555	21,074	1,481	21,508	20,281	1,227
Agriculture	19,930	19,762	168	20,016	19,934	82
Construction	13,353	13,232	121	7,981	7,930	51
Unspecified	11,856	11,623	233	4,301	4,244	57
Finance & Insurance	6,264	4,262	1,982	5,217	3,599	1,618
Mining	1,929	1,917	12	2,963	2,931	32
Electric Light & Power	1,367	1,295	72	1,025	959	66
Fishing, Forestry & Trapping	1,255	1,247	8	1,661	1,652	9
					406	405
					12,944	612
					2,921	2031
					1,885	1,820
					469	888
					1,047	793
					86	172
					5,372	5,302
					7,555	7,379
					1,047	683
					1,034	1,014
					342	336

7. Wage-earners in agriculture remained fairly constant between the two years.
8. Wage-earners in construction industries decreased severely between 1931 and 1936, the decrease being over 5,000 between the two years.
9. Wage-earners in 'unspecified' industries decreased by 7,547 between the two years. This classification includes those who cannot normally be attached to any particular industry but constitute a floating labor supply available wherever it is required. The previous comments on this classification are again applicable.
10. Finance and insurance witnessed a reduction in the number of wage-earners between 1931 and 1936, the reduction amounting to slightly over 1,000.
11. Mining and fishing, forestry and trapping show an increase in the number of wage-earners during the five years from 1931 to 1936, and wage earners in electric light and power industries declined by slightly over 300.

The main points to be noted in Table 10 are the sharp decrease in wage-earners in Manitoba and the heavy concentration of this decrease in the construction industry and in the casual labor market as indicated by the 'unspecified' classification.

DISTRIBUTION OF WAGE-EARNERS

The following table shows the distribution of wage-earners in the province of Manitoba:

TABLE 11

	<u>Male</u>	<u>Per Cent</u>	<u>Female</u>	<u>Per Cent</u>
Manitoba	119,939	100	38,468	100
Greater Winnipeg (partially estimated)	70,651	58.9	25,923	67.4
Brandon	3,360	2.7	1,167	3.0
Portage la Prairie	1,228	1.0	422	1.1
Towns, 1000 to 5000 population	6,176	5.1	1,673	4.3
Villages, under 1000 and unincorporated villages	18,666	15.7	9,226	24.0
Non-urban occupations, chiefly agriculture	19,858	16.6	57	.2

The above table shows the distribution of wage-earners in Manitoba according to geographical location. It will be noted that 59 per cent of the male wage-earners of the province are concentrated in the Greater Winnipeg area and that 67 per cent of the female wage-earners are also found in Greater Winnipeg. Brandon and Portage la Prairie account for 2.7 and 1 per cent of the male wage-earners of the province and 3 and 1 per cent of the female wage-earners respectively. Incorporated towns with a population of 1000 to 5000 account for 5.1 per cent of the male wage-earners and 4.3 per cent of the female wage-earners. Incorporated villages with a population of less than 1000, and unincorporated villages and towns have 15.7 per cent of Manitoba's male wage-earners and 24 per cent of the female wage-earners. Wage-earners in non-urban occupations, chiefly

agriculture, constitute 16.6 per cent of the total number of male wage-earners and .2 per cent of the total number of female wage-earners in Manitoba.

From the standpoint of wage-earners in Manitoba, the concentration in the Greater Winnipeg area is very significant and of sufficient magnitude to justify special treatment. For this reason it is proposed to deal with the employment position in Winnipeg in some detail, not only because of the importance of Greater Winnipeg from the employment standpoint in Manitoba, but as an employment study typical of a large urban centre.

PART IIEMPLOYMENT IN WINNIPEG

An analysis of employment, besides having a significance of its own, is relevant to a number of other important factors in the economic life of any community. The trend of employment is highly important, not only in relation to existing problems of unemployment, but also in respect to the need for estimating in a general way the possibility of its continuance and the prospective nature of the problem in any community. In addition, a study of employment is important from the standpoint of indicating the nature and extent of business and industrial activity and has a definite bearing on matters of public finance; the ability of governing bodies to impose rates of taxation; the revenues which may be expected from specific taxes and the point at which taxation becomes regressive.

The nature of employment depends on a number of factors, some of which are distinct and some inter-related. The factors of position and regional resources are more or less static. Others, such as social and political change are dynamic and the pace and direction of these forces are difficult to appraise. For example, opportunities for employment in an urban community depend upon the productive enterprises which have grown up within it and upon the function which that community performs in respect to the larger area which it serves. To evaluate the employment opportunities in the city of Winnipeg, it is, therefore, necessary at the outset to consider the nature of the services that Winnipeg performs on behalf of the larger community that surrounds it - a community which over runs provincial boundaries.



Winnipeg is situated on the margin of a vast prairie hinterland, and thus the problems and pattern of its economic life are essentially regional and not local. Products from the east, the south and from overseas flow through Winnipeg to the agricultural prairies, while at the same time the city performs important functions in respect to the merchandising of farm commodities which move eastward. It is inevitable, therefore, that distribution should be one of the principal industries in Winnipeg and that those industries which perform important functions within the distributive process, such as transportation, trade and service, should occupy an important place within its economic structure. The employment situation in Winnipeg at any time reflects in a very material way the conditions which surround regional trade, using that term in its broadest sense.

EMPLOYMENT IN WINNIPEG AND OTHER CITIES BY INDUSTRIES

It is important at the outset of this analysis to have clearly in mind the differences in industries and, therefore, employment opportunities in Winnipeg and other Canadian cities.

Table 12, showing the gainfully occupied classified by industry as compiled from the returns of the 1931 census, indicates the relative importance from an employment standpoint of industries in Winnipeg, Toronto, Vancouver, Saskatoon and Hamilton. The following points should be noted:

1. Employment in Winnipeg is concentrated in four major industries, namely; trade, service, manufacturing and transportation.

TABLE 12

PER CENT GAINFULLY OCCUPIED CLASSIFIED
BY INDUSTRY 1931

	Winnipeg	Toronto	Vancouver	Saskatoon	Hamilton	Montreal
All industries	100.00	100.00	100.00	100.00	100.00	100.00
Agriculture	1.55	.48	1.85	2.60	.74	.30
Forestry, Fishing, Trapping	.21	.05	3.54	.04	.03	.06
Mining, Quarrying	.32	.16	1.02	.16	.16	.21
Manufacturing	17.72	28.37	15.65	9.73	45.22	27.26
Electric Light & Power	.74	.84	.26	.54	.62	.60
Construction	7.35	8.06	5.71	9.79	8.57	11.26
Transportation	12.15	3.27	12.50	12.13	6.97	10.88
Trade	20.65	17.79	17.15	19.76	13.09	14.87
Finance, Insurance	4.92	5.71	7.22	4.81	2.43	4.19
Service	28.62	27.70	27.88	33.43	19.66	26.24
Unspecified	5.10	2.57	5.92	7.01	2.51	4.13

2. In Toronto, Montreal and Hamilton, manufacturing employs 28.37 per cent; 27.26 per cent and 45.22 per cent of all gainfully occupied, respectively. In Winnipeg, manufacturing employs only 17.72 per cent. While the percentage of gainfully occupied persons in the manufacturing industries of Winnipeg is much lower than that of the eastern cities, it is relatively high when compared with other western cities where manufacturing is an industry of minor importance.

3. The relative number of gainfully occupied in transportation is higher than in either Toronto, Montreal or Hamilton and about the same as Saskatoon.

4. In Winnipeg 20.65 per cent of those gainfully occupied were in trade as compared to 17.79 per cent in Toronto, 13.9 per cent in Hamilton and 14.87 per cent in Montreal.

5. Employment of people in service industries in Winnipeg amounted to 28.82 per cent of the total number gainfully occupied in the city as compared to 27.70 per cent in Toronto; 19.66 per cent in Hamilton and 26.24 per cent in Montreal.

This analysis shows that the nature and trend of employment will affect different cities in Canada in different ways. Conditions which bring an increase in employment in eastern Canadian cities may have little or no effect upon the trend of employment in a western city such as Winnipeg. Likewise, cities which enjoy trade with the Canadian market as a whole find a greater degree of stability in employment

than those cities which are more definitely related to specific areas within the Dominion. Also, the trends which are evident in urban centres in Canada as a whole may not be indicative of conditions in any particular urban centre.

POPULATION TRENDS AFFECTING EMPLOYMENT

<u>Males</u>	<u>1931</u>	<u>1936</u>	<u>Change</u>
Total population	110,000	106,000	-4,000
Natural increase in male population (1931-1936) (surplus of births over deaths)			3,000
Loss in male population due to people leaving city			<u>7,000</u>

Females

Total Population	109,000	110,000	+ 1,000
Natural increase 1931-1936			3,000
Loss in female population due to emigration			<u>2,000</u>
Total loss in population in Winnipeg			<u>9,000</u>

A study of the foregoing data indicates the following:

1. During the 5 years from 1931 to 1936 the male population of Winnipeg declined by 4,000. Had Winnipeg retained its natural increase in population during these years its population would have increased by about 3,000. There has, therefore, been a net emigration of about 7,000 males from Winnipeg between 1931 and 1936.

2. During the 5 years from 1931 to 1936 the female population of Winnipeg increased by 1,000. Had Winnipeg retained its natural increase in female population during these years its female population would have increased by about 3,000. In other words there has been

a net emigration of about 2,000 females from Winnipeg between 1931 and 1936.

3. The total emigration from the city (male and female) during the five years from 1931 to 1936 was about 9,000.

From which the following conclusions may be made:

- (a) The extremely depressed conditions which have prevailed in the city during the years mentioned have induced large numbers of people to seek opportunities elsewhere.
- (b) This loss in population is, in itself, an indication of relatively severe depression in the city of Winnipeg as compared with other cities in Canada, and since population growth and economic activity are interdependent, it has been a contributing factor to further contraction in business, with a consequent lowering of taxable capacity and a general increase in the problems of civic government.
- (c) When this loss in population is combined with a continuance of large scale unemployment and a sharp reduction in earnings of all classes of people, the inherent difficulties for Winnipeg are apparent. The loss of population in Winnipeg has found no compensation in population changes in suburban municipalities, where population has decreased or has been barely maintained at a constant level during the corresponding years.
- (d) The steady growth which marked the early history of Winnipeg came to an end sometime between 1930 and 1933. When a city or community ceases to develop normally it is faced with serious problems in respect to employment of its citizens, maintenance of civic institutions and the general well-being of its people. During the past five years Winnipeg has been in this position, a position which must be recognized in a study of employment.

AGE DISTRIBUTION AND EMPLOYMENT

The age groupings into which the population of a community falls are exceedingly important in their effects upon the labour supply. It is therefore essential that consideration be given to the main features of the age distribution of the employed population. To do this it is necessary to compare gainfully employed and wage-earners, not with the whole population, but with what might be called the potentially employable population.

It may be assumed with reasonable accuracy that the number of people within the age distribution 15-64 would indicate in a broad way the number of persons available for gainful employment. The number of persons in Winnipeg between the ages 15 to 64 were as follows:

	<u>1931</u>	<u>1936</u>	<u>Change</u>
Male	78,474	76,858	- 1,616
Female	70,390	81,921	+ 3,531

Age distribution in the city of Winnipeg is such as to make an increasing percentage of the population potentially employable. While the male population of the city of Winnipeg declined by 4,000 between 1931 and 1936, the male population between 15 and 64 years of age declined by only 1,616. In other words, changes in age distribution have minimized the effect of loss of population within those age groups which constitute the potential labour supply.

The female population of Winnipeg increased by 1,000 between 1931 and 1936, yet those between the ages of 15 and 64 increased by 3,531, or greater than the increase in the total female population.

This tendency for the population of Winnipeg to concentrate within the employable ages is highly important and will continue so for some time to come. It constitutes an important part of the employment problem and warrants serious consideration on the part of those people who are becoming concerned with matters affecting employment in the city of Winnipeg.

TREND OF EMPLOYMENT IN CANADIAN CITIES

The following table shows index numbers of employment for selected Canadian cities from 1926 to 1937, as compiled by the Dominion Bureau of Statistics, on the basis of regular reports by employers. The accompanying charts illustrate the main trends in Canadian cities.

TABLE 12 (a)
Index Numbers of Employment in Selected Cities

1926 = 100

<u>Year</u>	<u>Montreal</u>	<u>Toronto</u>	<u>Hamilton</u>	<u>Windsor</u>	<u>Vancouver</u>	<u>Winnipeg</u>
1926	99.7	99.6	99.3	99.9	99.9	99.2
1927	103.0	105.7	103.1	86.2	100.7	104.1
1928	108.2	112.1	108.2	137.2	104.3	110.1
1929	115.3	121.3	128.4	153.2	109.2	112.3
1930	111.8	116.3	113.9	128.6	109.8	107.6
1931	102.5	107.7	101.3	88.3	104.5	97.1
1932	88.1	92.5	83.7	78.4	88.5	86.6
1933	81.0	87.5	74.6	75.9	83.0	80.2
1934	84.5	93.5	84.1	93.1	87.4	82.9
1935	87.3	97.5	92.6	115.0	96.6	87.8
1936	92.1	101.5	98.3	121.3	103.7	92.3
1937	101.2	107.9	112.1	146.4	110.7	95.1
1938 (Jan)	99.0	108.4	109.8	147.8	108.4	92.0

Sources: Annual Review of Employment in Canada, 1937, Dominion Bureau of Statistics.

It will be noted from the above table that there has been wide variation in the indices of employment in Canadian cities. In general, from 1926 to 1929 employment indices rose, probably reaching all time highs in that year. The advance in employment indices from 1926 to 1929 was much more marked in eastern cities than in Winnipeg or in Vancouver.

1. The first step is to identify the problem. This involves understanding the situation, gathering information, and defining the problem clearly.

the 1990s, the number of people in the world who are undernourished has declined from 1.1 billion to 800 million. The number of people who are malnourished has declined from 1.5 billion to 1 billion. The number of people who are obese has increased from 100 million to 300 million. The number of people who are overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million.

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler and Sponholz (1980).

[illegible]

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

$$f(x) = \frac{1}{x^2} = x^{-2}$$

$$f'(x) = -2x^{-3} = -\frac{2}{x^3}$$

$$f''(x) = \frac{6}{x^4}$$

1. *Chlorophyll a* (Chl *a*)
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 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
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 11. *Chlorophyll k* (Chl *k*)
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 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
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 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
 36. *Chlorophyll aj* (Chl *aj*)
 37. *Chlorophyll ak* (Chl *ak*)
 38. *Chlorophyll al* (Chl *al*)
 39. *Chlorophyll am* (Chl *am*)
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 41. *Chlorophyll ao* (Chl *ao*)
 42. *Chlorophyll ap* (Chl *ap*)
 43. *Chlorophyll aq* (Chl *aq*)
 44. *Chlorophyll ar* (Chl *ar*)
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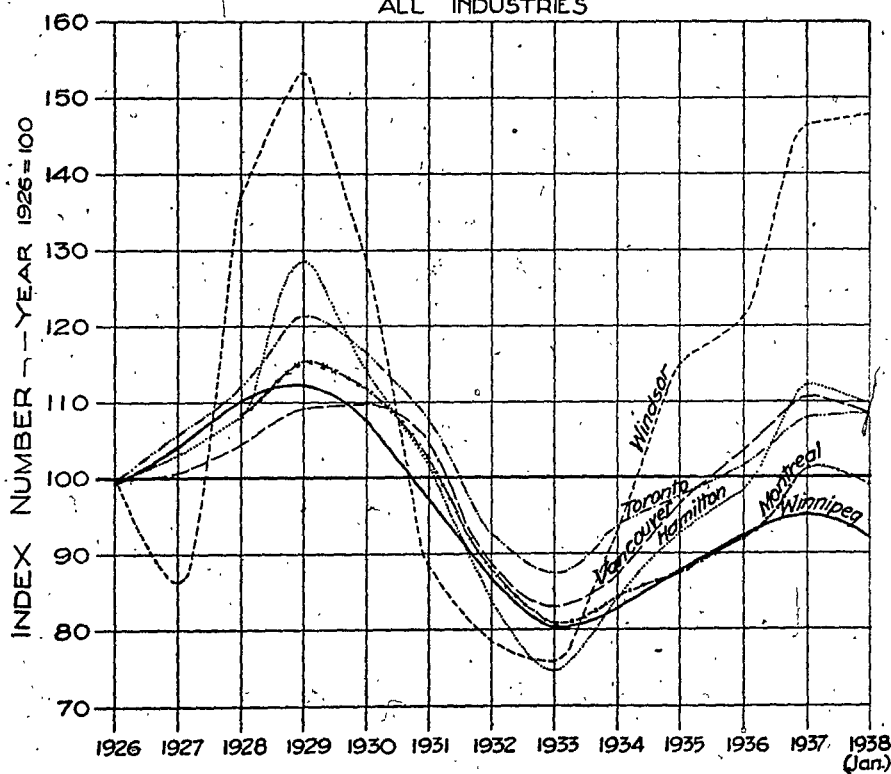
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TREND OF EMPLOYMENT IN CANADIAN CITIES

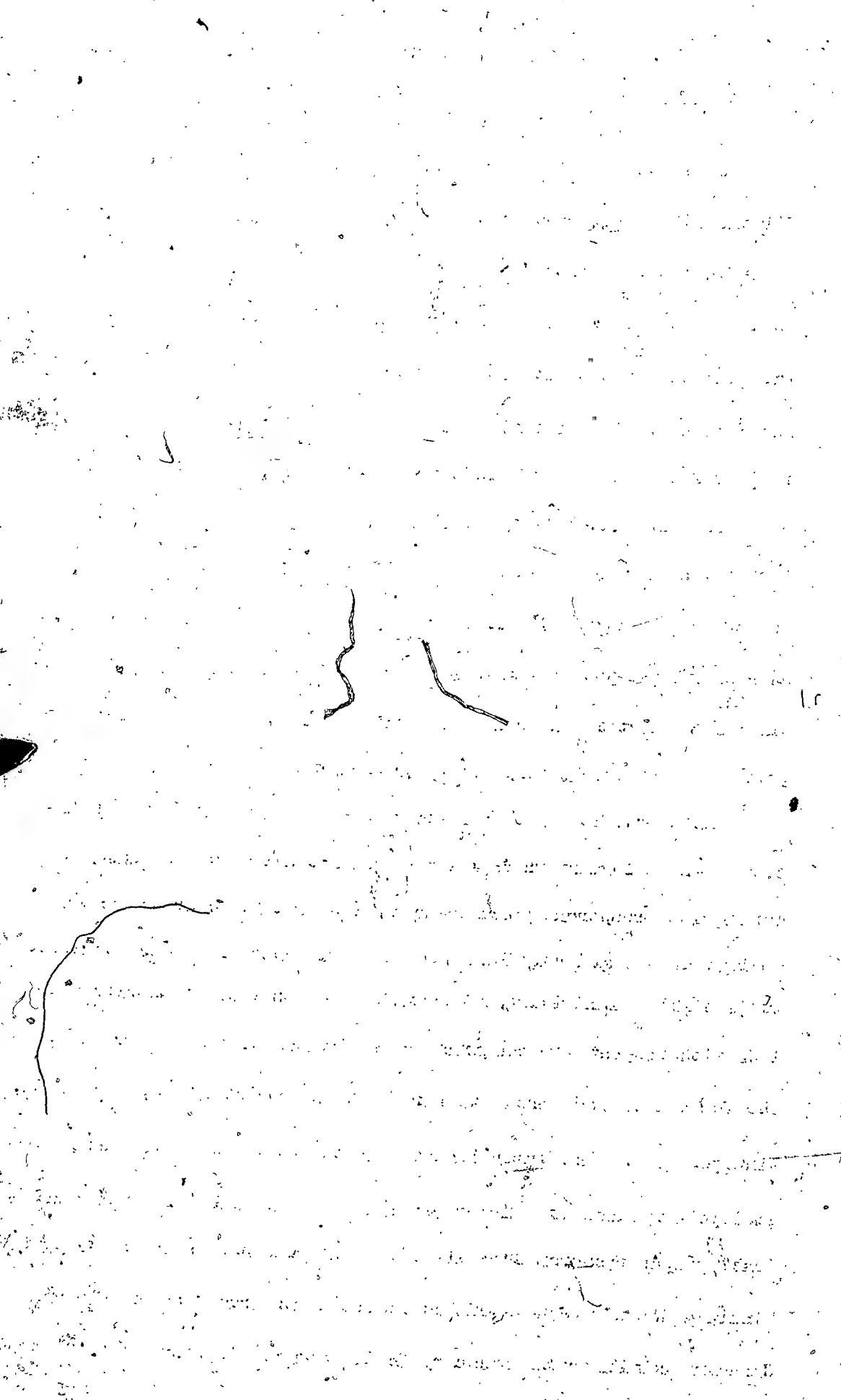
ALL INDUSTRIES



Commencing in 1930, employment indices began to decline and in all the cities referred to in the above table reached their lowest point in 1933. With due respect to the level at which employment indices stood in 1929, the decline in eastern cities was more drastic than in western cities. Employment indices for Montreal, Toronto and Vancouver did not fall as low as they did in Winnipeg, while indices for Hamilton and Windsor fell even lower than Winnipeg.

This relatively large decline in employment indices in Montreal, Toronto, Hamilton and Windsor was, in part, due to the stoppage of industrial production, while in Winnipeg many services continued to be rendered, especially those concerned with the handling of agricultural products. The reason for this is that low agricultural prices do not immediately affect production.

In short, it may be said that Winnipeg did not enjoy the increase in employment which other eastern Canadian cities enjoyed during the prosperous years prior to 1930 and the contraction in employment was slightly less marked in the years from 1930 to 1933. It is highly significant, however, to note what has transpired since 1933 with respect to the trend of employment in Canadian cities. The foregoing table shows that from the low point of the depression, Winnipeg is the only city included in the table where the index of employment stands at a lower level than the 1926 base. While experiencing some recovery from the low point of 1933, the recovery in Winnipeg has not been nearly as marked as the recovery in eastern Canadian cities or the recovery in Vancouver. In other words, Montreal



Toronto, Hamilton, Windsor and Vancouver have equalled or exceeded the 1931 level of employment while Winnipeg did not reach that point in 1937. These facts are important in a discussion of employment in the city of Winnipeg.

For a review of the employment situation in Winnipeg during the year 1937, it is of interest to quote from the annual report on employment issued by the Dominion Bureau of Statistics:

"There was a slight improvement in industrial conditions in Winnipeg, but employment continued dull, the index being lower than in any other of the cities for which data are compiled. As the great distributing centre of the prairie provinces, this city has been particularly affected by the unfavourable agricultural situation of recent years, intensifying the ill effects of the general depression in business. During 1937, an upward movement was noted in seven months, the difference between the low and the high index of employment being nearly ten points. The mean index for the year was 95.1 compared with 92.3 in 1936. The manufacturing division as a whole was brisker in every month of the year under review than in 1936; improvement occurred in iron and steel, food, textile and other factories. Transportation reported a slightly larger volume of employment. There was no general change in trade, while construction, on the whole, was rather quieter, in spite of improvement towards the close of the year, over the same period in 1936. An average staff of 40,803 was employed by the 484 firms whose data were received during the twelve months under review, compared with that of 39,595 reported by 473 establishments in 1936."

The employment situation in Winnipeg may be further considered from the standpoint of indices of employment in various industries:

T R A D E

The following table shows indices of employment in trade in five Canadian cities in June of each year from 1932 to 1937.

TABLE 12 (B)

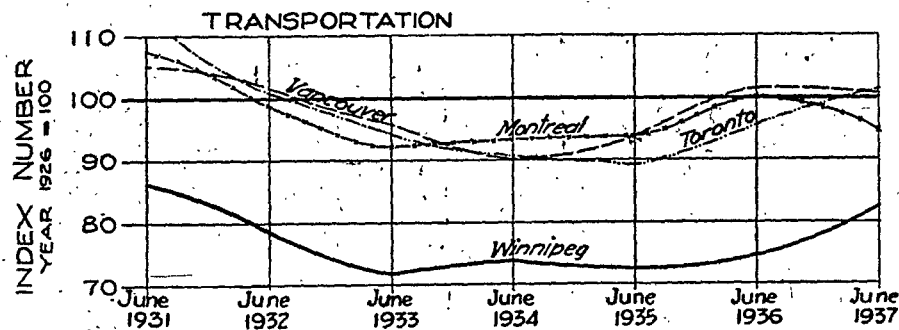
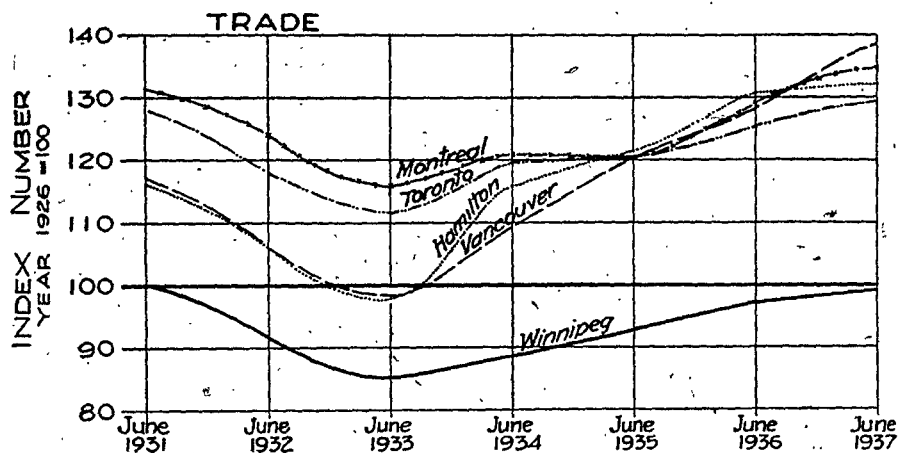
| | <u>Montreal</u> | <u>Tor</u> | <u>Hamilton</u> | <u>Winnipeg</u> | <u>Vancouver</u> |
|-----------|-----------------|------------|-----------------|-----------------|------------------|
| June 1931 | 131.3 | 128.4 | 116.2 | 100.2 | 117.3 |
| 1932 | 123.8 | 118.0 | 106.1 | 91.3 | 106.2 |
| 1933 | 116.0 | 111.5 | 97.9 | 85.1 | 98.3 |
| 1934 | 121.0 | 119.4 | 115.6 | 88.5 | 109.5 |
| 1935 | 120.3 | 120.7 | 121.3 | 92.6 | 120.4 |
| 1936 | 129.1 | 125.3 | 130.6 | 97.1 | 128.1 |
| 1937 | 134.4 | 129.1 | 132.0 | 99.0 | 138.2 |

It will be noted that there has been some improvement in the index of employment in trade in Winnipeg since the low point of 1933, but the improvement has been decidedly short of the improvement reported in other cities. With due regard to the importance of trade to Winnipeg this index is highly significant.

T R A N S P O R T A T I O N

The following table shows indices of employment in transportation in four Canadian cities. They indicate some improvement in the case of Winnipeg, but again, the index stands far below the other Canadian cities.

TREND OF EMPLOYMENT IN CANADIAN CITIES



TREND OF EMPLOYMENT
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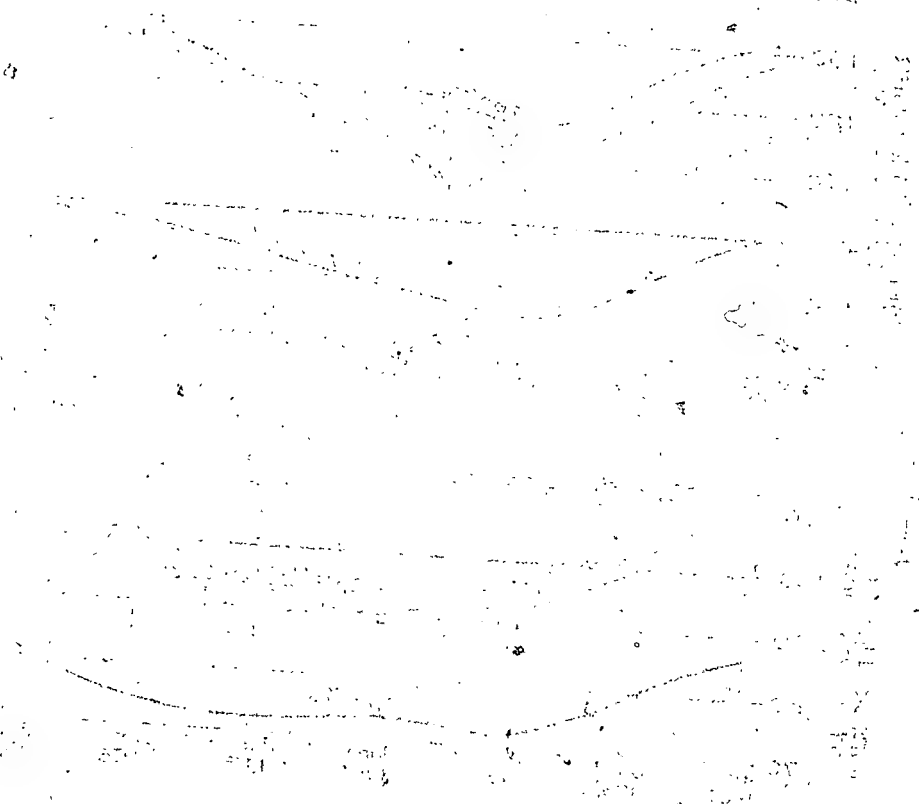


TABLE 12 (C)

| | | <u>Montreal</u> | <u>Toronto</u> | <u>Winnipeg</u> | <u>Vancouver</u> |
|------|------|-----------------|----------------|-----------------|------------------|
| June | 1931 | 107.1 | 130.8 | 86.0 | 105.7 |
| " | 1932 | 98.8 | 100.6 | 78.4 | 101.4 |
| " | 1933 | 92.1 | 94.0 | 71.6 | 95.8 |
| " | 1934 | 93.1 | 90.6 | 73.3 | 90.1 |
| " | 1935 | 93.7 | 89.2 | 72.1 | 93.7 |
| " | 1936 | 100.1 | 95.6 | 74.6 | 101.2 |
| " | 1937 | 94.6 | 101.2 | 82.4 | 100.5 |

C O N S T R U C T I O N

The following table shows indices of employment in construction in five Canadian cities:

TABLE 12(D)

| | <u>Montreal</u> | <u>Toronto</u> | <u>Windsor</u> | <u>Winnipeg</u> | <u>Vancouver</u> |
|------------|-----------------|----------------|----------------|-----------------|------------------|
| June, 1931 | 111.9 | 124.1 | 68.5 | 75.9 | 120.8 |
| 1932 | 84.4 | 88.2 | 14.5 | 42.2 | 62.8 |
| 1933 | 47.9 | 48.3 | 25.2 | 21.6 | 40.2 |
| 1934 | 46.0 | 55.9 | 20.2 | 25.7 | 36.1 |
| 1935 | 38.3 | 63.2 | 26.7 | 37.6 | 59.8 |
| 1936 | 42.6 | 58.7 | 31.8 | 29.1 | 63.7 |
| 1937 | 61.9 | 66.5 | 57.0 | 36.2 | 62.4 |

The position of the construction industry in Canada is clearly shown in the above table. The index of employment in the construction industry in Winnipeg fell to the lowest level of any city included in the table in 1931 with only a slight recovery since.

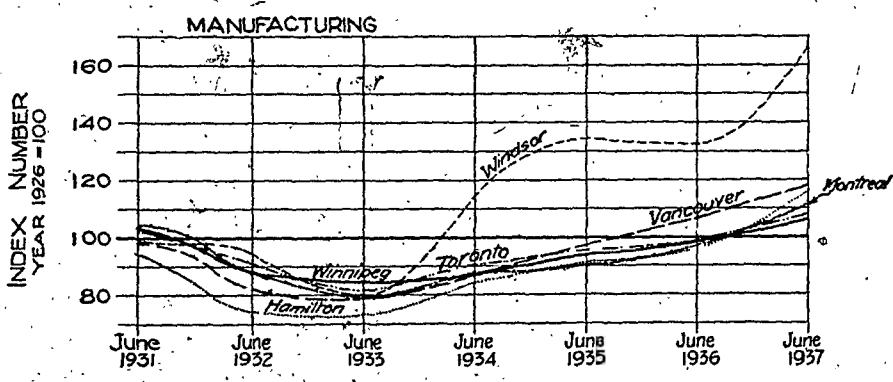
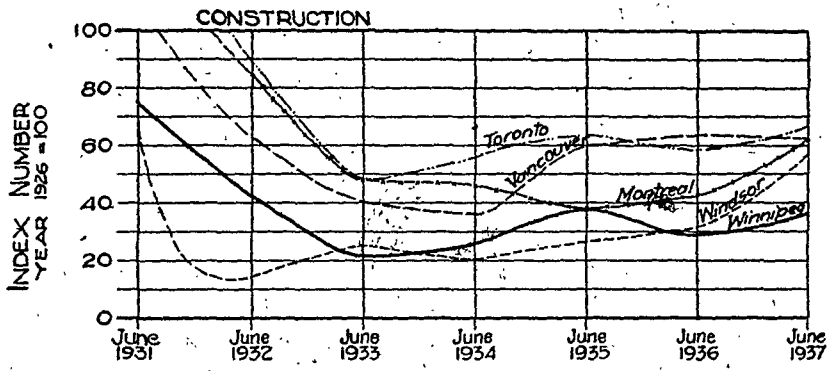
M A N U F A C T U R I N G

The following table shows indices of employment in manufacturing in six Canadian Cities:-

TABLE 12 (E)

| | <u>Montreal</u> | <u>Toronto</u> | <u>Hamilton</u> | <u>Windsor</u> | <u>Winnipeg</u> | <u>Vancouver</u> |
|------------|-----------------|----------------|-----------------|----------------|-----------------|------------------|
| June, 1931 | 103.7 | 102.8 | 94.2 | 98.1 | 102.9 | 98.0 |
| 1932 | 87.5 | 90.7 | 74.4 | 94.2 | 87.6 | 82.0 |
| 1933 | 79.3 | 81.6 | 73.2 | 79.8 | 84.5 | 78.6 |
| 1934 | 87.8 | 90.2 | 84.5 | 114.5 | 87.4 | 86.5 |
| 1935 | 90.2 | 95.5 | 91.2 | 134.7 | 93.9 | 97.1 |
| 1936 | 97.2 | 98.8 | 95.9 | 132.5 | 98.2 | 106.4 |
| 1937 | 111.8 | 107.9 | 116.1 | 166.6 | 105.8 | 117.4 |

TREND OF EMPLOYMENT IN CANADIAN CITIES



1. THE STATE OF TEXAS, County of EL PASO, do hereby certify that JOSEPH A. GARCIA is the duly qualified and acting County Clerk of said County.

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the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion. The number of people aged 65 and over is expected to increase from 200 million to 400 million. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion.

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Journal of Management Education 30(6)p.789-806

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Journal of Management Education 30(6)p. 789-804

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...and the fact that the *Journal* is a journal of the American Psychological Association, the largest and most influential organization in the field of psychology, adds to the journal's prestige and makes it a must-read for all psychologists.

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...and the fact that the *Journal* is a journal of the American Psychological Association, the largest and most influential organization in the field of psychology, adds to the impact of the *Journal* on the field.

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the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion. The number of people aged 65 and over is expected to increase from 200 million to 400 million. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion.

Manufacturing in Winnipeg has, according to index numbers of employment, made a better showing than other industries. The position, however, must be clarified. A considerable portion of the manufacturing industry in Winnipeg has to do with the processing of farm products. In times of depression, the farm, unlike the factory, continues to produce as much as it can. As a result, the flow of farm products continued throughout the depression, with due allowance for the effects of drought and rust. Therefore, the processing of farm products, in so far as carried on in Winnipeg meant a stabilizing factor in manufacturing operations. This, along with an expansion in some lines of manufacturing caused the Winnipeg indices to hold up fairly well during the past few years. The degree of recovery, however, in the Winnipeg index is much lower than in the indices in other cities shown.

The above data are sufficient to indicate the unfavourable employment situation which existed in Winnipeg in recent years as compared with other leading Canadian cities. Winnipeg has been more seriously affected by depressed conditions than any other large Canadian city, a fact which must be recognized in dealing with employment.



MORE DETAILED ANALYSIS OF EMPLOYMENT BY IN-
DUSTRIES AND OCCUPATIONS

INTRODUCTION

The purpose of this section is to review the occupational and industrial composition of employment in the city of Winnipeg. Because of their intimate connection, it is desirable to study those two aspects of employment together. The technical skill developed by the working people in a community depends on the character of the industrial activity within that community. A detailed analysis of skill, however, involves an examination of occupational distribution.

The distinction between "industry" and "occupation" should be made clear at the outset. Whereas an occupation is a particular type of work, a calling or craft, comprising all persons doing the same work, an industry is a production unit bringing workers of various occupations under one roof. For example, occupationally a worker may be a carpenter or blacksmith but if employed in the transportation industry he comes under the industrial heading "transportation", if employed in a trade establishment, he is classified under the heading "trade".

GAINFULLY OCCUPIED BY OCCUPATIONS:

Table 3 shows those gainfully occupied for the city of Winnipeg in the census years 1931 and 1936, along with the increase or decrease which took place in the various occupations as between the two years.

It will be noted that in 1931 the gainfully occupied in all

occupations amounted to 96,845, whereas in 1936 the gainfully occupied in all occupations amounted to 90,153. In other words, in the five years from 1931 to 1936 there was a decline of 6,692 in the gainfully occupied in the city of Winnipeg. Of this decline, 5,758 took place in respect to the male population and 934 in respect to the female population. In the decline in the number of gainfully occupied people in the city of Winnipeg between 1931 and 1936 the major portion of the decline took place in respect to males.

Among those who find their usual occupations in services or service industries there were 22,226 gainfully occupied in 1931 as compared with 21,886 gainfully occupied in 1936.

It is a matter of importance to note at this point the relative importance of services and service industries in respect to employment in Winnipeg, this line of activity being the largest in the city and accounting for about half of the gainfully occupied women in the city. A slight decrease in the numbers of those gainfully occupied in services and service industries is noted between 1931 and 1936.

In 1931 manufacturing was the second largest industry in the city in respect to the numbers gainfully occupied therein. In that year manufacturing reported 12,849 gainfully occupied workers, and in 1936 reported 13,497 gainfully occupied, or an increase of 648 during the five intervening years.

In respect to the number of gainfully occupied, manufacturing held an unique position in Winnipeg between 1931 and 1936 in that

it ranked as one of the very few industries which showed an increase in the number of those gainfully occupied between 1931 and 1936, and showed a greater increase in this respect than any other industry in the city.

Trade, both wholesale and retail, reported 12,736 as gainfully occupied in 1931 and 12,750 as gainfully occupied in 1936. Broadly speaking the gainfully occupied in trade was maintained in Winnipeg during the difficult years from 1931 to 1936.

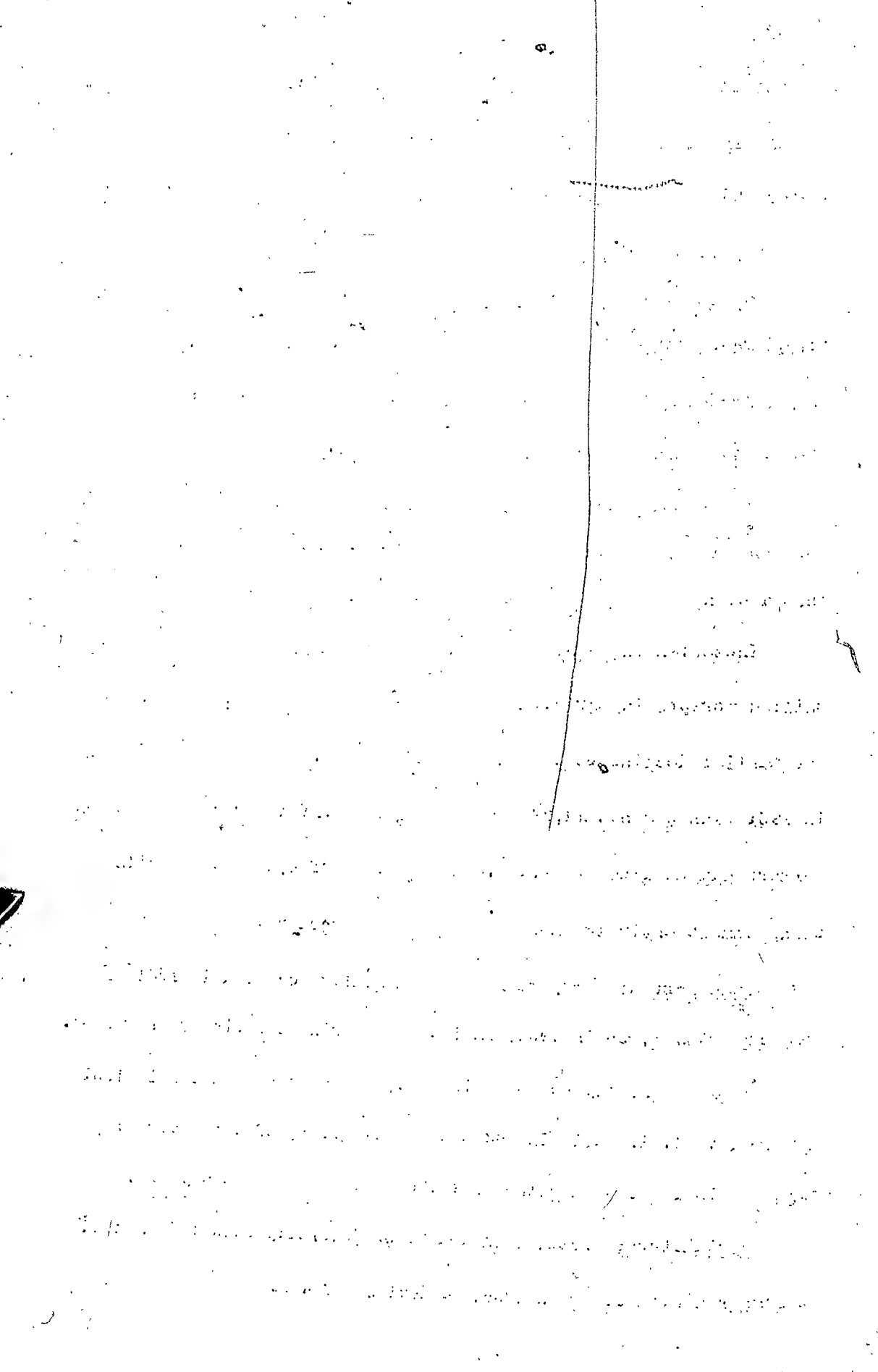
Those gainfully occupied in clerical work showed a sharp decline between 1931 and 1936. A decline of 1,109, and the major portion of this decline took place in respect to females.

Those finding employment as unskilled workers (excluding unskilled workers in agriculture, mining and logging) showed a very substantial decline between 1931 and 1936. In this classification in 1931 Winnipeg had 11,874 while in 1936 gainfully occupied unskilled workers had declined to 7,481, or a decline of 4,393, the decline being almost entirely among male unskilled workers.

Transportation reported 8,489 gainfully occupied in 1931 as compared with 8,536 in 1936, an increase during the five years of 47.

Those gainfully occupied in building and construction in 1931 amounted to 7,019 while in the same industry, 5,829 were gainfully occupied in 1936, a decline of 1,190 as between the two years.

Agricultural pursuits showed 2,035 gainfully occupied in 1931 as compared with 1,630 in 1936, a decline of 405.



Finance provided gainful occupation for 1,745 in 1931 as compared with 1,515 in 1936, or a decline of 230 between the two census years.

Warehousing and storage provided occupation for 1,876 people in 1931 and 1,922 in 1936, or an increase of 46 between the two years.

Electric light and power remained relatively stable during the five years, a slight increase being reported in the number of those so occupied.

TABLE 13

GAILFULLY OCCUPIED - CITY OF WINNIPEG - CENSUS YEARS 1931 & 1936
BY OCCUPATIONS

| | 1931 | | Total | 1936 | | Total | Female | Increase or Decrease | |
|---|--------|--------|--------|--------|--------|--------|--------|----------------------|--------|
| | Total | Male | | Male | Female | | | Total | Female |
| All Occupations | 96,845 | 71,644 | 25,201 | 90,153 | 65,886 | 24,267 | -6,692 | -5,758 | - 934 |
| Leading Occupations | | | | | | | | | |
| Services and Service Industries | 22,226 | 9,936 | 12,290 | 21,886 | 9,735 | 12,151 | - 340 | - 201 | - 139 |
| Manufacturing | 12,849 | 10,697 | 2,152 | 13,497 | 11,180 | 2,317 | + 648 | + 483 | + 165 |
| Trade | 12,736 | 10,169 | 2,567 | 12,750 | 10,154 | 2,596 | + 14 | - 15 | + 29 |
| Clerical | 14,732 | 7,643 | 7,089 | 13,623 | 7,328 | 6,295 | -1,109 | - 315 | - 734 |
| Unskilled (not agricultural, mining or logging) | 11,874 | 11,674 | 200 | 7,481 | 7,349 | 132 | -4,393 | -4,325 | - 68 |
| Transportation and Communication | 8,489 | 8,098 | 391 | 8,536 | 8,237 | 299 | + 47 | + 139 | - 92 |
| Building & Construction | 7,019 | 7,019 | - | 5,829 | 5,827 | 2 | -1,190 | -1,192 | + 2 |
| Agriculture | 2,035 | 2,010 | 25 | 1,630 | 1,617 | 13 | - 405 | - 393 | - 12 |
| Warehousing & Storage | 1,876 | 1,444 | 432 | 1,922 | 1,500 | 422 | + 46 | + 56 | - 10 |
| Finance, Insurance | 1,745 | 1,713 | 32 | 1,515 | 1,492 | 23 | - 230 | - 221 | - 9 |
| Electric Light & Power (including stationary engineers) | 769 | 769 | - | 788 | 788 | - | + 19 | + 19 | - |

GAINFULLY OCCUPIED BY INDUSTRY
CITY OF WINNIPEG

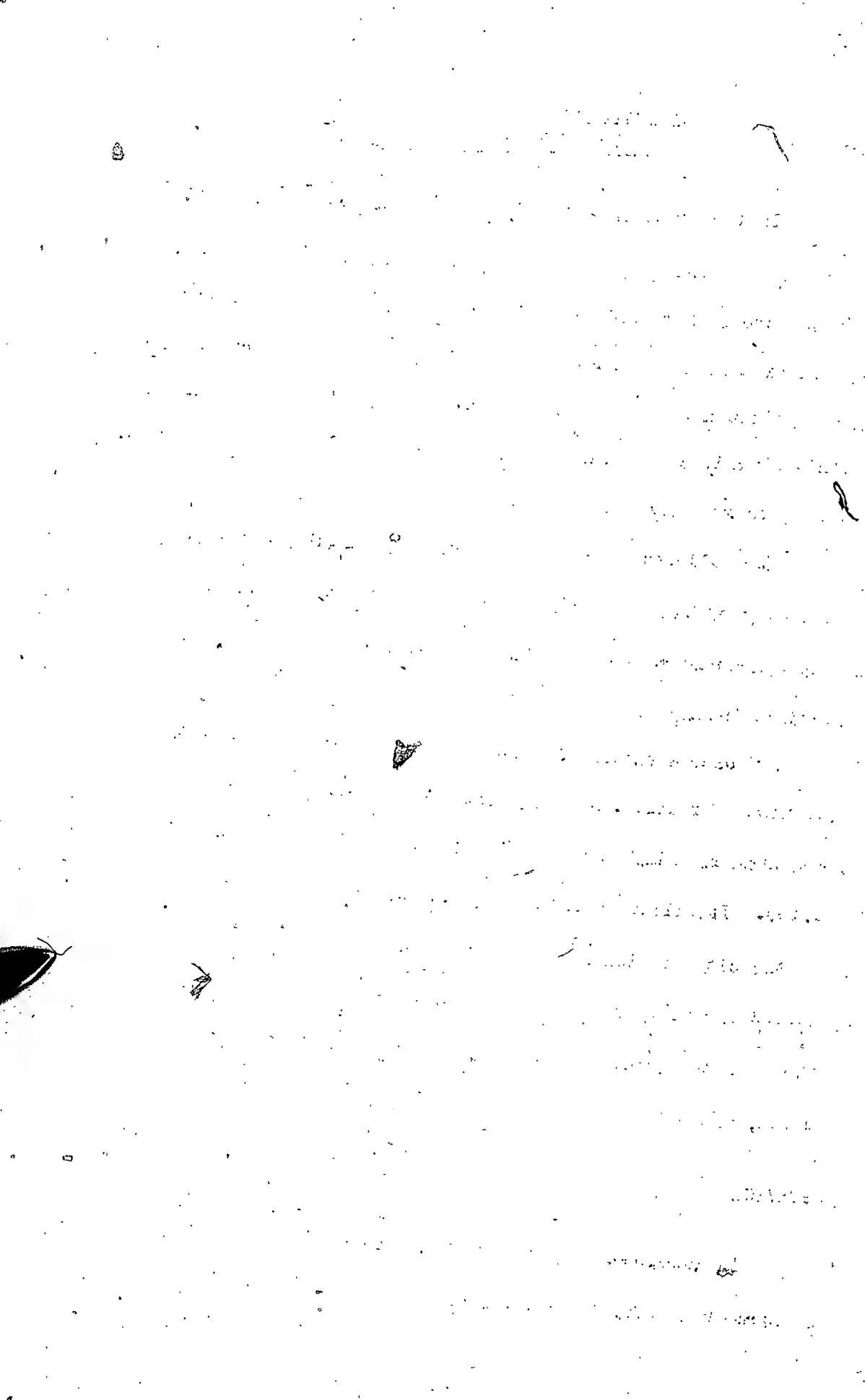
In the preceding discussion we have dealt with the gainfully occupied in the city of Winnipeg by occupations, an analysis which cuts across the boundaries of various industries and brings together work of a similar character in various industries. The occupational analysis can best be illustrated by the CLERICAL classification. In this classification those engaged in clerical work, in all industries, are gathered together under one heading.

We will now approach the matter of the gainfully occupied in the city of Winnipeg by industries, giving separate treatment to employment as reported by the major industries operating in the city of Winnipeg.

Table 14 shows gainfully occupied by industry for the city of Winnipeg for 1931 and 1936, along with the increase or decrease in the numbers gainfully occupied in each industry as between these dates. It will be noted as in Table 13 that the gainfully occupied in the city of Winnipeg in 1931 numbered 96,845 as compared with 90,153 in 1936, or a decrease of 6,692 between 1931 and 1936. In the main this decline took place in the case of gainfully occupied males, and only a minor decline is noted in the case of females.

SERVICE

In 1936, 28,564 people were occupied in service in Winnipeg as compared with 27,909 in 1931, an increase of 655 in the latter



year. A slight decrease is noted in the case of females gainfully occupied in the service industry and an increase of 788 is noted in the number of males. Gainful occupations provided by service and service industries are fairly equally divided between males and females.

TRADE

Trade provided gainful occupations for 19,999 persons in 1931 and 20,428 in 1936, an increase of 429. The males outnumbered females in this industry by about three to one, and during 1931 and 1936 the number of males increased by 654 as compared with a decrease of 225 in the number of females gainfully occupied.

MANUFACTURING

In 1931, 17,162 persons were gainfully occupied in manufacturing in Winnipeg as compared with 16,127 in 1936. Between the two years a decline of 1,035 was reported and this decline was practically all in the number of gainfully occupied males. A slight increase is noted in the gainfully occupied females. Employment in this industry is predominately male.

TRANSPORTATION AND COMMUNICATION

A decrease took place in those gainfully occupied in transportation and communication in Winnipeg between 1931 and 1936. In the former year 11,797 were gainfully occupied as compared with 11,063 in 1936,

a decrease in the latter year as compared with the former of 734.

The decline was practically all in the number of gainfully occupied males, the number of females in the industry being negligible.

BUILDING AND CONSTRUCTION

In 1931, 7,118 were gainfully occupied in building and construction in Winnipeg, while in 1936, this number had decreased to 5,591, a decline of 1,527.

UNSPECIFIED

There are a group of workers in the city of Winnipeg who cannot be placed in any particular industry and who in Table 14, are listed as "Unspecified". These numbered 4,935 in 1931 and 1,436 in 1936. A decline of 3,499. It may be taken that this group includes casual labour which is utilized by various industries from time to time, and is probably largely "unskilled labour". More will be said below about this group as they constitute about one half of the decline which has taken place in the number gainfully occupied in Winnipeg between 1931 and 1936.

FINANCE AND INSURANCE

In finance and insurance 4,765 persons were gainfully occupied in 1931 and 4,052 in 1936. A decline of 713 is noted between the two years. Two-thirds of those gainfully occupied in finance and insurance are males.

* AGRICULTURE

Those gainfully occupied in agriculture but resident in Winnipeg numbered 1,930 in 1931 and 1,485 in 1936, indicating a decline of 445 between the two years. There are very few females engaged in agriculture.

* ELECTRIC LIGHT AND POWER

Those gainfully occupied in this industry in 1931 numbered 718 as compared with 573 in 1936, a decline of 145 reported between the two years.

* MINING, QUARRYING, ETC.

Gainfully occupied in Winnipeg in mining, quarrying, etc., in 1931 numbered 306, but by 1936 this number increased to 470, an increase of 164, the increase being predominately in male employment.

* LOGGING

The number of those who are usually gainfully occupied in logging and resident in the city of Winnipeg increased from 206 in 1931 to 364 in 1936, an increase of 158.

* Some unemployed persons (a number on relief) residing in the city are included in this classification.



TABLE 14

GAINFULLY OCCUPIED BY INDUSTRY - CITY OF WIN. IPEG

| | 1931 | | | 1936 | | | Increase or Decrease | | |
|--------------------------------|--------|--------|--------|--------|--------|--------|----------------------|--------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| All industries | 96,840 | 71,644 | 25,201 | 90,153 | 65,886 | 24,267 | -6,692 | -5,758 | - 934 |
| <u>Leading Industries</u> | | | | | | | | | |
| Service or Service Industries | 27,909 | 13,855 | 14,054 | 28,564 | 14,643 | 13,921 | ✓ 655 | ✓ 788 | - 133 |
| Trade | 19,939 | 14,240 | 5,759 | 20,428 | 14,894 | 5,534 | ✓ 429 | ✓ 654 | - 225 |
| Manufacturing | 17,162 | 14,548 | 2,614 | 16,127 | 13,477 | 2,650 | -1,035 | -1,071 | ✓ 36 |
| Transportation & Communication | 11,797 | 10,935 | 862 | 11,063 | 10,385 | 678 | - 734 | - 550 | - 184 |
| Building & Construction | 7,118 | 7,038 | 80 | 5,591 | 5,546 | 45 | -1,527 | -1,492 | - 35 |
| Unspecified | 4,835 | 4,766 | 169 | 1,436 | 1,393 | 43 | -3,499 | -3,373 | - 126 |
| Finance, Insurance | 4,765 | 3,201 | 1,564 | 4,052 | 2,742 | 1,310 | - 713 | - 459 | - 254 |
| Agriculture | 1,930 | 1,897 | 33 | 1,485 | 1,469 | 16 | - 445 | - 428 | - 17 |
| Electric Light & Power | 718 | 660 | 48 | 573 | 519 | 54 | - 145 | - 141 | - 4 |

SUMMARY

The foregoing brief analysis of those gainfully occupied in various industries in Winnipeg may be summarized in the statement that there has been an increase in those gainfully occupied in Trade, in Service and minor increases in those gainfully occupied in Mining and Logging. On the other hand, definite decreases are noted in the number of those gainfully occupied in Manufacturing, in Building and Construction, in Transportation and Communication, in Finance and Insurance, in Agriculture, in Light and Power and in the "Unspecified" classification. The net effect of these increases and decreases, however, is to show a reduction of 6,692 in the number of gainfully occupied in the city of Winnipeg between 1931 and 1936.

TABLE 15

WAGE EARNERS, 14 YEARS OF AGE AND OVER,
BY INDUSTRY AND SEX, FOR THE CITY
OF WINNIPEG, 1931-1936

Wage earners constitute a somewhat smaller group than the gainfully occupied dealt with in the preceding sections of this report. The number of wage-earners in relation to the number of gainfully occupied in 1931 and 1936 are as follows:

| <u>1931</u> | <u>Total</u> | <u>Male</u> | <u>Female</u> |
|--------------------|--|-------------|---------------|
| Gainfully occupied | 96,845 | (1) 71,644 | (1) 25,201 |
| Wage earners- | 85,160 | (2) 62,884 | 22,276 |
| Per cent | 87.93% | | |
| <u>1936</u> | (1) Includes 6 males and 1 female 10-13 yrs. of age. | | |
| | (2) Includes 5 males 10-13 years of age. | | |
| Gainfully occupied | 90,153 | 65,886 | 24,267 |
| Wage earners | 77,324 | 56,003 | 21,321 |
| Per cent | 85.76% | | |

It will be noted from Table 15 that the total number of wage earners ranges from 11,000 to 13,000 less than the total number of gainfully occupied; the difference being accounted for by those who are working for their own account and who are not working for wages or salary.

Table 16 shows wage earners in the city of Winnipeg by industries in 1931 and 1936 along with the increase or decrease that took place between the two years. It will be noted that in 1931, 85,160 wage earners were reported for the city of Winnipeg as compared with 77,324 in 1936, a decrease of 7,836 in the latter year compared with the former. This decrease was largely due to a smaller number of male wage earners in Winnipeg in 1936 than in 1931.

In Table 15 it was shown that there had been a decline of 6,692 in the number of people gainfully occupied in the city of Winnipeg between 1931 and 1936. In other words the decline in respect to those gainfully occupied was less than the decline in respect to wage earners. These figures indicate clearly that there has been some increase in the number of those gainfully occupied and working for their own account and that the whole decline in the numbers of people gainfully occupied in Winnipeg has been due to a contraction in the number of wage earners. This is a natural effect of depressed conditions which have given

an impetus to numbers of people working on a commission, or other similar basis, (no doubt some of those displaced as wage earners during the five years from 1931 to 1936) to enter some form of business activity on a basis other than wages and salary.

Table 16 also shows wage earners by industries in 1931 and 1936 and it is to these statistics that we now turn.

SERVICE

Service and service industries comprise the largest number of wage earning people in the city of Winnipeg. In 1931, 22,258 wage-earners were reported in service industries as compared with 22,610 in 1936, an increase of 352 in the latter year. In 1931 the number of females exceeded the number of males in these industries by a small margin, but in 1936 there was a slight majority of males. More than one-half of the female wage earners in the city of Winnipeg were reported in service or service industries, in both 1931 and 1936.

TRADE

In trade there has been an increase in the number of wage-earners. In 1931, 16,813 wage earners were reported in trade while in 1936, 16,948 were shown, an increase of 135. Again, in 1931 about one-third of those reported were female and about two-thirds males, but in 1936 males showed an increase, whereas females showed a decrease.

MANUFACTURING

In 1931 wage earners reported in manufacturing industries numbered 16,578, but in 1936 a decrease is noted, the number so reported amounting to 15,447, a decrease of 1,131.

The decline reported in manufacturing took place entirely among male wage earners, the number of female wage earners increased slightly. (This radical change in the number of wage earners in manufacturing in Winnipeg will be dealt with fully in a subsequent report when these industries are considered in detail.)

TRANSPORTATION

In 1931, 11,453 wage earners were reported in transportation, while in 1936, 10,589 were so reported, a decrease of 864.

CONSTRUCTION

5,861 wage earners were reported in construction industries in 1931 as compared with 4,144 in 1936, or a decline of 1,717. Those figures indicate a very high percentage decline in the number of wage earners reported in construction in 1931 and 1936, and affecting male wage earners almost entirely.

FINANCE

In finance 4,366 wage earners were reported in 1931 as compared with 3,697 in 1936, a decline of 669 between the two years. The



number of wage earners in finance includes about one-third female and two-thirds male and the decline was somewhat more marked in the case of females than in the case of males in proportion to the number of each engaged in finance.

LIGHT AND POWER

Those reported in light and power industries are predominately male. In 1931, 717 wage earners were reported in these industries and in 1936, 573, a reduction of 144 between the two years.

UNSPECIFIED

Table 16 also shows the number of wage earners in occupations which cannot be classified in the usual industries. This number was shown at 4,933 in 1931 and 1,432 in 1936, a decline of 3,501. It may be taken for granted that this group consists largely of unskilled labour which is not attached to any one industry.

SUMMARY

It will be noted from the above discussion and from Table 16, that the numbers of wage earners engaged in manufacturing, construction, transportation, and 'unspecified' industries showed the largest declines. Increased numbers of wage earners are found in forestry, mining, trade and service. These statistics will be elaborated upon in the section which deals with the number of wage earners in each of the major industries.

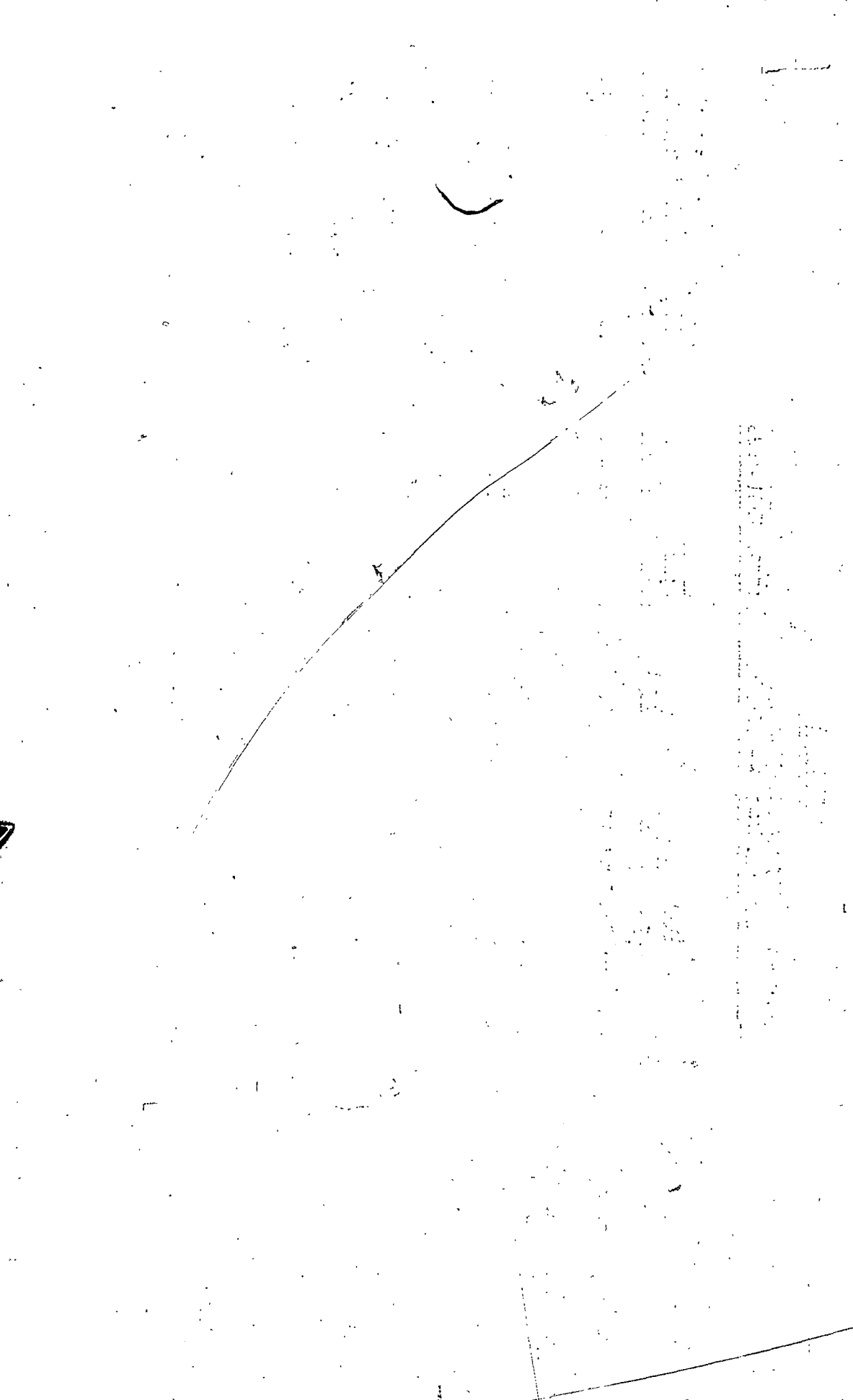
TABLE 16

WAGE-EARNERS, 14 YEARS OF AGE AND OVER, BY INDUSTRY
AND SEX, FOR THE CITY OF WINNIPEG, 1931-1936

| | 1931 | | Total | 1936 | | Increase or Decrease | |
|------------------------|---------------|-------------|--------|--------|-------------|----------------------|--------------|
| | Total | (1)
Male | | Total | (2)
Male | Total | Female |
| All Industries | 85,160 | 62,884 | 22,276 | 77,324 | 56,003 | -7,836 | -6,881 - 955 |
| Leading Industries: | | | | | | | |
| Service | (2)
22,258 | 10,937 | 11,321 | 22,610 | 11,376 | 352 | 439 - 87 |
| Trade | 16,813 | 11,225 | 5,588 | 16,948 | 11,631 | 135 | 406 - 271 |
| Manufacturing | 16,578 | 13,981 | 2,597 | 15,447 | 12,825 | -1,131 | -1,156 25 |
| Transportation | 11,453 | 10,593 | 860 | 10,589 | 9,915 | -864 | -678 - 186 |
| Construction | 5,861 | 5,783 | 78 | 4,144 | 4,103 | -1,717 | -1,680 - 37 |
| Unspecified | 4,933 | 4,764 | 169 | 1,432 | 1,389 | -3,501 | -3,375 - 126 |
| Finance | 4,366 | 2,807 | 1,559 | 3,697 | 2,392 | -669 | -415 - 254 |
| Agriculture | 1,649 | 1,621 | 28 | 1,123 | 1,108 | -526 | -513 - 13 |
| Electric light & power | 717 | 659 | 58 | 573 | 519 | -144 | -140 - 4 |

(1) Includes 5 males 10-14 years of age

(2) Industry groups include only persons in industries with 10 or more persons. Therefore 87 males and 8 females are omitted.



WAGE-EARNERS, 14 YEARS OF AGE AND OVER,
BY OCCUPATION AND SEX, FOR THE CITY OF
WINNIPEG 1931- 1936

In the preceding section an analysis has been made of wage earners by industry for the city of Winnipeg. A somewhat different comparison is made by studying wage earners from the standpoint of occupations.

Table 17 shows wage earners, 14 years of age and over, by occupation and sex, for the city of Winnipeg in 1931 and 1936, along with the increase or decrease in the number of wage earners in each occupation between the two years. In this table wage earners classified by occupations in 1931 numbered 85,100 as compared with 77,324 in 1936, or a decrease of 7,776. Of this decrease 6,801 was reported in the case of males and 955 in the case of females. The decline in the number of male wage earners far exceeded the decline in the number of female wage earners even when a relative proportion of each in all occupations is considered.

SERVICE

As in the case of the analysis on the basis of industry, service accounts for the largest number of wage earners in the city of Winnipeg. In 1931, 17,659 wage earners were reported as compared with 17,254 in 1936, a decline of 395 of which 269 were males. In service and service industries the number of female wage earners exceeded the number of male wage earners.

TABLE 17

WAGE EARNERS, 14 YEARS OF AGE AND OVER, BY OCCUPATION
AND SEX, FOR THE CITY OF WINNIPEG, 1931-1936

| | 1931 | | 1936 | | Increase or Decrease | |
|---|--------|--------|--------|--------|----------------------|--------|
| | Total | Male | Female | Total | Male | Female |
| All Occupations | 85,160 | 62,864 | 22,276 | 77,324 | 56,003 | 21,321 |
| | | (1) | | | -7,836 | -6,881 |
| | | | | | | - 955 |
| Leading Occupations | | | | | | |
| (2) | | | | | | |
| Service | 17,659 | 7,783 | 9,876 | 17,264 | 7,514 | 9,750 |
| | | | | | - 395 | - 126 |
| Clerical | 14,607 | 7,550 | 7,057 | 13,432 | 7,190 | 6,242 |
| | | | | | -1,175 | - 815 |
| Others (labourers) | 11,840 | 11,543 | 197 | 7,422 | 7,295 | 127 |
| | | | | | -4,418 | -4,348 |
| Manufacturing | 11,025 | 9,245 | 1,780 | 11,774 | 9,737 | 2,037 |
| | | | | | + 749 | + 257 |
| Trade | 9,524 | 7,113 | 2,411 | 9,309 | 6,906 | 2,403 |
| | | | | | - 215 | - 8 |
| Transportation and Communication | 8,050 | 7,661 | 389 | 8,049 | 7,751 | 298 |
| | | | | | - 1 | - 91 |
| Building and construction | 5,733 | 5,733 | - | 4,333 | 4,333 | - |
| | | | | | -1,400 | -1,400 |
| Warehousing and storage | 1,868 | 1,435 | 432 | 1,908 | 1,496 | 422 |
| | | | | | + 40 | + 50 |
| Agriculture | 1,762 | 1,742 | 20 | 1,267 | 1,256 | 11 |
| | | | | | - 495 | - 436 |
| Finance, Insurance | 1,341 | 1,314 | 27 | 1,157 | 1,143 | 14 |
| | | | | | - 184 | - 171 |
| Electric Light & Power (including stationary engineers) | 747 | 747 | - | 736 | 736 | - |
| | | | | | + 41 | + 41 |

(1) Includes 5 males 10-13 years of age.

(2) Occupation groups include only persons in occupations with 10 or more persons. Therefore 232 males and 47 females are omitted.

CLERICAL

In clerical work in 1931, 14,607 wage earners were reported as compared with 13,432 in 1936. A decline of 1,175 was shown between the two years. It will be noted from Table 17 that clerical work is fairly evenly divided between males and females.

TRADE

In trade, 9,524 wage earners were reported in 1931 as compared with 9,309 in 1936. Male wage earners predominated in this occupational group outnumbering female wage earners by 3 to 1. Between 1931 and 1936 a decline of 218 occurred in the number of wage earners reported in connection with trade.

MANUFACTURING

In 1936, 11,774 wage earners were reported in manufacturing in Winnipeg as compared with 11,025 in 1931, an increase of 749.

TRANSPORTATION AND COMMUNICATION

In 1931, 8,050 wage earners were reported in transportation and communication and almost an identical number, 8,049 reported in 1936. Occupations in transportation and communication were largely male.

BUILDING AND CONSTRUCTION

A sharp decline took place in the number of wage earners in building and construction between 1931 and 1936. In the latter year 4,333 were reported as compared with 5,733 in 1931, making a decline of 1,400 in the latter year as compared with the former.

WAREHOUSING AND STORAGE

An increase in the number of wage earners in warehousing and storage was reported between 1931 and 1936. In the former year wage earners numbered 1,868 and in the latter year 1,908.

FINANCE AND INSURANCE

In finance and insurance 1,341 wage earners were reported in 1931 as compared with 1,157 in 1936, or a decline of 184 between the two years. Occupations in this group were predominately male.

ELECTRIC LIGHT AND POWER

In 1931 electric light and power occupations showed 747 wage earners while, by 1936, this number had increased to 788, an increase of 41. Male wage earners only appeared in this group.

AGRICULTURE

In 1931, 1,762 wage earners resident in Winnipeg were reported in agriculture as compared with 1,267 in 1936, thus a decline of 495 is evident between the two years.

PART IIIEARNINGS OF WAGE - EARNERS
CITY OF WINNIPEG

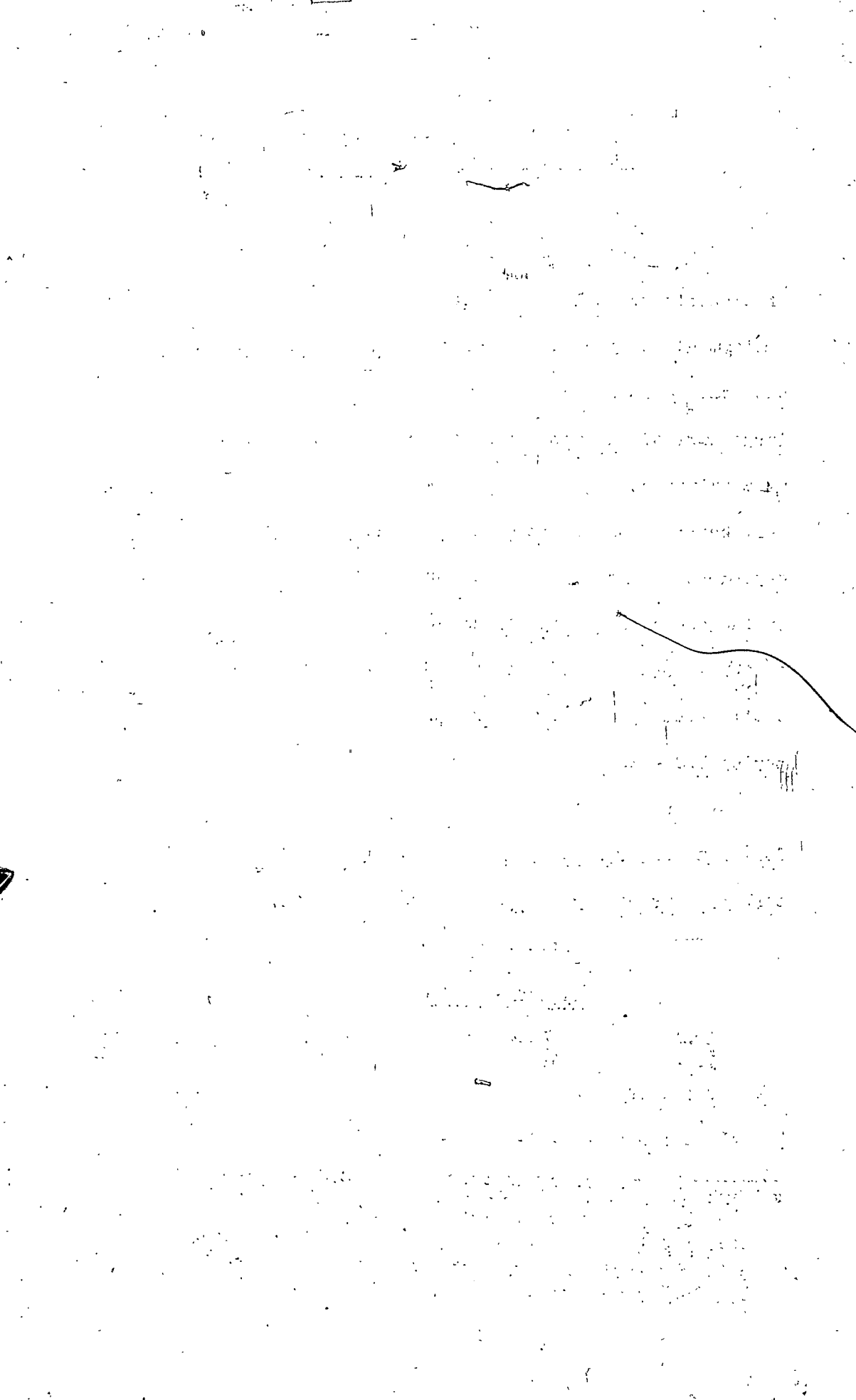
Having discussed in a detailed way employment in the city of Winnipeg we will now pass to a consideration of the terms of employment, or the earnings of those who work in Winnipeg. From what was said in the preceding sections, it is evident that a large part of the population of the city of Winnipeg is employed at a salary or wage, or is dependent upon a salary or wage. The well-being of those employed on this basis as well as of their dependents, rests upon the extent of their salary or their wage on the one hand and the trend of salaries and wages in relation to the general level of prices. In this section of the report we shall attempt to evaluate the trend in these respects during the period 1931-1936.

The position may be broadly illustrated by referring to the following figures which show the number of wage earners reporting earnings during the census years 1931 and 1936.

| | Number of
Wage-earners
<u>Reporting Earnings</u> | <u>Average</u> | <u>Wages Paid</u> |
|------------|--|----------------|-----------------------|
| 1931 | 82,854 | \$990.68 | \$82,081,800 |
| 1936 | 72,678 | 831.93 | <u>60,462,900</u> |
| Difference | | | - \$21,618,900 26.34% |

The above table shows that aggregate wages in Winnipeg amounted to

★ From the census data two slightly different interpretations are possible in respect to 1936 earnings. The data in Table A show earnings for those wage-earners whose present and usual occupations were the same on June 1, 1936 as on June 1, 1931. This group of wage-earners would represent, in the main, those wage-earners.



\$60,462,900 in 1936 as compared with \$82,081,800 in 1931.

The above statistics include both male and female wage-earners. In the following table male and female wage-earners are quoted separately;

| <u>Male</u>
<u>Wage Earners</u> | <u>Number</u>
<u>Reporting</u>
<u>Earnings</u> | <u>Wages</u>
<u>Received</u> | <u>Average</u>
<u>Wages</u> |
|------------------------------------|--|---------------------------------|--------------------------------|
| 1931 | 61,172 | \$68,496,800 | \$1,120 |
| 1936 | 51,996 | 49,952,400 | 961 |
| Difference | | | - \$ 159 |

Aggregate earnings of male wage-earners declined from \$68,496,800 in 1931 to \$49,952,400 in 1936, or a decline of \$18,544,400 between the two years. Average earnings of male wage-earners amounted to \$1,120 in 1931 and \$961 in 1936, showing an average decline of \$159.

| <u>Female</u>
<u>Wage Earners</u> | <u>Number</u>
<u>Reporting</u>
<u>Earnings</u> | <u>Wages</u>
<u>Received</u> | <u>Average</u>
<u>Wages</u> |
|--------------------------------------|--|---------------------------------|--------------------------------|
| 1931 | 21,682 | \$13,585,000 | \$ 627 |
| 1936 | 20,682 | 10,510,500 | 508 |
| Difference | | | - \$ 119 |

Aggregate earnings of female wage earners decreased by \$3,074,000 between the two years. In 1931 average earnings of female wage earners were \$627, and in 1936, \$508.

Footnote cont'd -

who continued in the same occupations between 1931 and 1936.

TABLE A

| <u>1936</u> | <u>Number of Wage-earners</u>
<u>Reporting Earnings</u> | <u>Average</u> | <u>Wages</u>
<u>Paid</u> |
|-------------|--|----------------|-----------------------------|
| Both sexes | 72,678 | \$831.93 | \$60,462,900 |
| Male | 51,996 | 961.00 | 49,952,400 |
| Female | 20,682 | 508.00 | 10,510,500 |

EARNINGS OF WAGE-EARNERS IN CERTAIN SELECTED OCCUPATIONS

Table 18 shows the average earnings of wage-earners and weeks employed in 1936 in certain leading occupations. The table indicates that the highest average annual earnings of male wage-earners were received by those employed in "Finance and Insurance". In the case of females, the highest average annual earnings occurred in the occupations coming under the heading "Transportation and Communication". The average number of weeks worked during the year and average weekly earnings were, similarly, highest in those occupations. Average earnings of males in the building trades were \$716 as compared with \$963 in manufacturing and \$1,121 in transportation and communication. The lowest earnings were those of labourers and unskilled workers whose average annual wage was only \$511.

Footnote cont'd. -

The data in Table B. show the total number of persons of wage-earner status on June 1, 1936, and reporting earnings:

| 1936 | TABLE B. | | Wages
Paid |
|------------|--|----------|---------------|
| | Number of Wage-earners
Reporting Earnings | Average | |
| Both sexes | 76,668 | \$807.91 | \$61,940,700 |
| Male | 55,458 | 925.00 | 51,295,400 |
| Female | 21,210 | 502.00 | 10,645,300 |

The decline in average earnings, especially for males, was in no small measure due to the considerable number of wage-earners on relief.

The following table shows average earnings of wage-earners not on relief for the city of Winnipeg, for the census year 1936:

TABLE C

| | |
|--------------|-----------|
| Both sexes - | \$ 918.00 |
| Males - | 1,092.00 |
| Females - | 522.00 |

It is apparent therefore, that if male wage-earners on relief are excluded from the total, the decline in average earnings of male wage-

TABLE 18

WAGE-EARNERS, 14 YEARS OF AGE AND OVER, NOT ON RELIEF, REPORTING EARNINGS AND WEEKS EMPLOYED, SHOWING TOTAL EARNINGS AND WEEKS EMPLOYED DURING THE 12 MONTHS' PERIOD ENDED JUNE 1-1936
FOR THE CITY OF WINNIPEG

| Occupation group | Wage
Earnings
Reporting | A V E R A G E | | | | | Weekly Earnings
per weeks worked |
|----------------------------------|-------------------------------|---------------|-------------------|-----------|-----------------|--------------------|-------------------------------------|
| | | Earnings | Weeks
Employed | Earnings | Weeks
Worked | Weekly
Earnings | |
| Males | | | | | | | |
| Manufacturing | 8,503 | \$8,189,900 | 340,506 | \$ 963.00 | 40.05 | \$18.52 | \$24.05 |
| Electric Light and Power | 675 | 793,500 | 30,127 | 1,183.00 | 44.63 | 22.75 | 26.50 |
| Building and construction | 3,239 | 2,319,700 | 102,311 | 716.00 | 31.59 | 13.77 | 22.67 |
| Transportation & communication | 6,456 | 7,236,500 | 276,805 | 1,121.00 | 42.88 | 21.56 | 26.14 |
| Trade | 6,032 | 9,054,100 | 272,919 | 1,501.00 | 45.25 | 28.87 | 33.18 |
| Finance, insurance | 1,034 | 2,477,600 | 50,407 | 2,396.00 | 48.75 | 46.08 | 49.15 |
| Service | 6,336 | 7,700,400 | 287,685 | 1,215.00 | 45.40 | 23.37 | 26.77 |
| Clerical | 6,795 | 7,829,700 | 318,290 | 1,152.00 | 46.84 | 22.15 | 24.60 |
| Labourers and unskilled workers | 4,217 | 2,155,500 | 130,315 | 511.00 | 30.90 | 9.83 | 16.54 |
| Females | | | | | | | |
| Manufacturing | 1,917 | 842,500 | 74,994 | 439.00 | 39.12 | 8.44 | 11.23 |
| Transportation and communication | 291 | 227,000 | 13,643 | 780.00 | 45.53 | 15.00 | 16.64 |
| Trade | 2,223 | 1,091,000 | 85,225 | 491.00 | 38.34 | 9.44 | 12.80 |
| Service | 8,994 | 3,660,200 | 376,471 | 407.00 | 41.86 | 7.83 | 9.72 |
| Clerical | 6,066 | 4,436,900 | 276,407 | 729.00 | 45.42 | 14.02 | 16.05 |

Note: Wage-earners, for whom figures are shown in this table, are those whose present and usual occupations were the same and whose usual status, as well as present status, was that of a wage-earner.

TREND OF WAGE RATES IN WINNIPEG, TORONTO AND VANCOUVER, 1931-1936

Up to this point in our discussion of earnings in the city of Winnipeg we have made use almost exclusively of data compiled from census information by the Dominion Bureau of Statistics. It is desirable to compare the results obtained from census sources with those obtained from other sources.

Table 19 shows the trend in wage rates prevailing in certain industries of Winnipeg, Toronto and Vancouver during the years 1930 to 1936. The data are based on information gathered by the Dominion Department of Labour and published periodically as a supplement to the Labour Gazette. In considering the figures, it should be borne in mind that they represent in the main, the wages paid to skilled or semi-skilled workers, who in the majority of cases are organized into trade unions. Further it should be remembered that the statistics quoted in the following pages are significant only insofar as they indicate trends in wage rates during the past seven years. That is to say, they are not an accurate representation of the annual earnings of wage-earners employed in the respective industries. The reason for this is that they fail to take into account such factors as hours of work, holidays and seasonal lay-offs. For example, average wage rates in Winnipeg in the building trades were generally higher than those in Electric Street Railways. However, the comparison yields a different result when it is realized that the street railway employee works all year round while the wage-earner in the building trades remains idle during most of the winter months.

The table illustrates concretely the marked downward trend in wage rates in Winnipeg during the past seven years. The decline has been most pronounced in the building trades which have suffered more

Footnote concluded-

earners between 1931 and 1936, in the case of those who were following the same occupations and their usual occupation in 1931 and 1936, was relatively small. The large decline in income among wage-earners as between the two years was largely in a contraction in employment as opposed to reductions in wage rates. In the case of female wage-earners the decline in average wages is more marked than among males, and those on relief being a relatively small part in respect to lowering wage earnings.

than most other occupations. The average wage rate in the building trades in 1936 was only 73 per cent of the rate prevailing in 1930. The wage rate in the metal and printing trades and electric street railways in 1936 stood at 89 per cent of their 1930 level. In the case of common factory labour, the decline was only 8 per cent. The reason for this is clear. Wage fluctuations are never as great in the case of unskilled labour as they are in respect to skilled labour. Rather, depressed conditions in their case are reflected in mass lay-offs and unemployment. In general, wage rates remained at a relatively higher level in Toronto and Vancouver during the seven year period. In the case of the building trades, however, the decline was quite as sharp as it was in Winnipeg. The 1936 wage rate per hour was 73 per cent of the 1930 figure in Toronto and 78 per cent in Vancouver. The printing trades suffered only a small reduction in Toronto; in Vancouver, the average rate in the printing trades was only 88 per cent of the 1930 figure.

Any discussion of wage rates must take into consideration the trend in hours of work. The trend in Toronto was generally downward in the building and metal trades. The hours of labour remained the same in the printing trades, while in the case of electric street railways they were reduced until 1933, and then raised somewhat in the years following. In Winnipeg hours of work were steady in the building and printing trades; a reduction was noted in the metal trades. The trend in Vancouver was downward in the metal trades and in electric street railways, remaining fairly constant in the building and printing trades.

TABLE 19

Average Wage Rates in Selected Industries of
Winnipeg, Toronto and Vancouver, 1930-1936

| W I N N I P E G | | | | | |
|--------------------------------|--------------------------------|-----------------------------|--------------------------------|---|---|
| Year | Building
Trades
per hour | Metal
Trades
per hour | Printing
Trades
per week | Electric
Street
Railway
per hour | Common
Factory
Labour
per hour |
| 1930 | \$ 1.10 | \$.67 | \$37.28 | \$.64 | \$.41 |
| 1931 | 1.03 | .62 | 37.45 | .64 | .41 |
| 1932 | 1.01 | .61 | 36.03 | .60 | .38 |
| 1933 | .84 | .60 | 33.32 | .54 | .38 |
| 1934 | .81 | .59 | 33.32 | .55 | .38 |
| 1935 | .81 | .61 | 33.32 | .55 | .3 |
| 1936 | .80 | .60 | 33.23 | .57 | .38 |
| 1936 in
per cent
of 1930 | 73% | 89% | 89% | 89% | 92% |
| T O R O N T O | | | | | |
| 1930 | \$ 1.13 | \$.69 | \$37.82 | \$.64 | \$.42 |
| 1931 | 1.05 | .67 | 37.82 | .65 | .40 |
| 1932 | .89 | .64 | 36.83 | .65 | .40 |
| 1933 | .78 | .63 | 35.23 | .65 | .39 |
| 1934 | .77 | .63 | 35.79 | .65 | .38 |
| 1935 | .83 | .63 | 36.12 | .65 | .38 |
| 1936 | .83 | .63 | 36.42 | .65 | .38 |
| 1936 in
per cent
of 1930 | 73% | 91% | 96% | 101% | 90% |
| V A N C O U V E R | | | | | |
| 1930 | \$ 1.10 | \$.80 | \$42.33 | \$.68 | \$.47 |
| 1931 | 1.05 | .76 | 41.79 | .68 | .44 |
| 1932 | .96 | .74 | 37.88 | .68 | .40 |
| 1933 | .86 | .72 | 37.67 | .66 | .36 |
| 1934 | .83 | .71 | 37.67 | .66 | .41 |
| 1935 | .86 | .72 | 37.67 | .66 | .42 |
| 1936 | .86 | .72 | 37.19 | .67 | .44 |
| 1936 in
per cent
of 1930 | 78% | 90% | 88% | 98% | 94% |

Source:- Wages and Hours of Labour, supplement to Labour Gazette, 1937.

DISTRIBUTION OF EARNINGS IN WINNIPEG BY INCOME GROUPS,
1931 and 1936.

The following table shows the total number of male wage earners in Winnipeg in 1931 and 1936 along with their distribution among various other earnings classifications:

TABLE 20

| | 1931 | | | 1936 | | |
|-------------|---------------------------|----------------------------|------------|---------------------------|----------------------------|------------|
| | No. of
Wage
Earners | Percentage
Distribution | | No. of
Wage
Earners | Percentage
Distribution | |
| | | Earnings
Groups | Cumulative | | Earnings
Groups | Cumulative |
| | | % | % | | % | % |
| Total | 62,884 | 100.0 | | 55,558 | 100.0 | |
| No Earnings | 3,653 | 5.81 | 5.81 | 6,620 | 11.92 | 11.92 |
| \$ 1 - 49 | 980 | 1.56 | 7.37 | 1,610 | 2.90 | 14.82 |
| 50 - 449 | 12,864 | 20.46 | 27.83 | 10,712 | 19.28 | 34.10 |
| 450 - 949 | 13,477 | 21.43 | 49.26 | 13,638 | 24.54 | 58.64 |
| 950 - 1449 | 13,594 | 21.62 | 70.88 | 12,051 | 21.69 | 80.33 |
| 1450 - 1949 | 8,238 | 13.10 | 83.98 | 5,267 | 9.48 | 89.81 |
| 1950 - 2949 | 5,122 | 8.15 | 92.13 | 3,184 | 5.73 | 95.54 |
| 2950 - 4949 | 2,386 | 3.79 | 95.92 | 1,409 | 2.54 | 98.08 |
| 4950 & over | 858 | 1.36 | 97.28 | 537 | .97 | 99.05 |
| Not stated | 1,712 | 2.72 | 100.00 | 520 | .95 | 100.00 |

The lowering of the income of wage earners in Winnipeg between 1931 and 1936 is clearly indicated in the above table. For instance, in 1931, 5.81 per cent of wage-earners in Winnipeg reported no earnings, while in 1936, 11.92 per cent reported no earnings, more than double the percentage in 1931. In 1931, 7.37 per cent of wage-earners in Winnipeg reported earnings of less than \$50.00, whereas in 1936, 14.82 per cent reported earnings of less than \$50.00. In 1931, 49.26 per cent reported earnings of less than \$950.00 as compared with 58.64 per cent in 1936. In 1931, 70.88 per cent of wage-earners reported earnings of less than \$1,450, and in 1936, 80.33 per cent reported earnings of less than \$1,450.

In the higher income groups, the same contraction in earnings is noted. In 1931, 8.15 per cent of wage-earners in Winnipeg had incomes between \$1,950 and \$2,949, as compared with 5.73 per cent in 1936. In

1931, 3.79 per cent of wage-earners had incomes between \$2,950 and \$4,949, as compared with 2.54 per cent in the same classification of 1936. Thus, throughout the entire distribution, there has been a downward movement in incomes.

The figures shown in Table 20 for wage-earners in 1936 include those on relief.

In Table 21 wage-earners on relief and not on relief are shown separately in order to give due consideration to the influence exerted within each earnings group by those on relief:

TABLE 21

Wage-earners, 14 years of age and over, on relief and not on relief, by sex and earnings group, for the city of Winnipeg, 1936 Census

| Earnings Group | Both Classes | M A L E S | | F E M A L E S | | |
|-----------------------|--------------|-----------|---------------|---------------|-----------|---------------|
| | | On Relief | Not on Relief | Both Classes | On Relief | Not on Relief |
| Total | 55,558 | 7,645 | 47,913 | 21,295 | 673 | 20,622 |
| No earnings | 6,620 | 4,338 | 2,282 | 953 | 321 | 632 |
| \$ 1 - 49 | 1,610 | 820 | 790 | 1,210 | 126 | 1,084 |
| 50 - 449 | 10,712 | 2,199 | 8,513 | 8,545 | 213 | 8,332 |
| 450 - 949 | 13,638 | 209 | 13,429 | 7,481 | 8 | 7,473 |
| 950 - 1449 | 12,051 | 6 | 12,045 | 2,410 | - | 2,410 |
| 1450 - 1949 | 5,267 | - | 5,267 | 476 | - | 476 |
| 1950 - 2949 | 3,184 | - | 3,184 | 98 | - | 98 |
| 2950 - 4949 | 1,409 | - | 1,409 | 8 | - | 8 |
| 4950 and over | 537 | - | 537 | 3 | - | 3 |
| Earnings not stated - | 530 | 73 | 457 | 111 | 5 | 106 |

Note - Wage-earners, for which figures are shown in table, are those whose usual status, as well as present status, was that of a wage-earner

THE COST OF LIVING

The standard of living enjoyed by wage-earners depends upon at least two factors; the money income received and the price level. In other words, the value of a weekly wage depends upon the amount of goods and services which can be obtained in exchange for it. This thought leads to a consideration of the trend in the cost of living during the past six years.

The Dominion Department of Labour has been computing an index number of the cost of living of working-men's families since 1913. Table 22 is an abridgment of this index. The last column, showing index numbers for "all items" indicates that the cost of living fell sharply from a high of 160 in 1929 to a low of 123 in the early summer of 1935. Since that point it has been rising steadily, reaching 128 in the final months of 1936. It should be noted that the greatest increase has occurred in the case of food and rent. The other items considered in the index fluctuated relatively little during the period which we are studying.

For purposes of comparison it may be well to consider an index of retail prices prepared independently by the Dominion Bureau of Statistics. (Table 23). In this case the year 1926 is used as a base and the index is computed from different material and a somewhat different viewpoint.

The same general trend is noted in both computations. In 1929, the general index stood at 99.9. It then fell to a low of 76.6 in May of 1933. In the period immediately following an upward trend is apparent. This upward trend was generally continuous to December, 1936. Higher prices for foods, rentals and clothing were chiefly responsible for the advance.

TABLE 22

CHANGES IN THE COST OF LIVING IN CANADA FROM
1929 to 1936 (Average Prices in 1913 = 100)

| <u>Month and Year</u> | <u>Food</u> | <u>Fuel and
Light</u> | <u>Rent</u> | <u>Clothing</u> | <u>Sundries</u> | (1)
<u>All Items</u> |
|-----------------------|-------------|---------------------------|-------------|-----------------|-----------------|-------------------------|
| December 1929 | 161 | 157 | 158 | 156 | 166 | 160 |
| December 1930 | 138 | 156 | 160 | 148 | 165 | 151 |
| December 1931 | 107 | 152 | 153 | 127 | 163 | 135 |
| December 1932 | 96 | 145 | 141 | 114 | 161 | 125 |
| December 1933 | 100 | 142 | 129 | 113 | 157 | 123 |
| December 1934 | 103 | 144 | 129 | 115 | 154 | 123 |
| January 1935 | 102 | 144 | 129 | 115 | 155 | 123 |
| February 1935 | 103 | 144 | 129 | 115 | 155 | 124 |
| March 1935 | 104 | 143 | 129 | 113 | 155 | 124 |
| April 1935 | 102 | 143 | 129 | 113 | 155 | 123 |
| May 1935 | 102 | 141 | 131 | 113 | 155 | 123 |
| June 1935 | 103 | 139 | 131 | 113 | 154 | 123 |
| July 1935 | 103 | 139 | 131 | 113 | 154 | 123 |
| August 1935 | 105 | 139 | 131 | 113 | 154 | 124 |
| September 1935 | 105 | 140 | 131 | 113 | 154 | 124 |
| October 1935 | 106 | 140 | 132 | 115 | 154 | 126 |
| November 1935 | 109 | 141 | 132 | 115 | 154 | 126 |
| December 1935 | 111 | 141 | 132 | 115 | 154 | 127 |
| January 1936 | 111 | 142 | 132 | 115 | 154 | 127 |
| February 1936 | 110 | 142 | 132 | 114 | 154 | 126 |
| March 1936 | 111 | 142 | 132 | 114 | 154 | 126 |
| April 1936 | 107 | 142 | 132 | 114 | 154 | 125 |
| May 1936 | 106 | 141 | 133 | 114 | 154 | 125 |
| June 1936 | 106 | 140 | 133 | 114 | 154 | 125 |
| July 1936 | 109 | 140 | 133 | 114 | 154 | 126 |
| August 1936 | 111 | 139 | 133 | 114 | 154 | 127 |
| September 1936 | 113 | 140 | 133 | 114 | 153 | 127 |
| October 1936 | 112 | 140 | 135 | 114 | 153 | 127 |
| November 1936 | 113 | 141 | 135 | 114 | 154 | 128 |
| December 1936 | 114 | 142 | 135 | 115 | 154 | 128 |

(1) The figures for "All Items" were calculated by giving the following weights to each group: Food, 35%; Fuel, 8%; Rent to 1 1/2%; Clothing, 16 1/2%; Sundries, 20%

Source: Canada Year Book, 1937 - P. 788

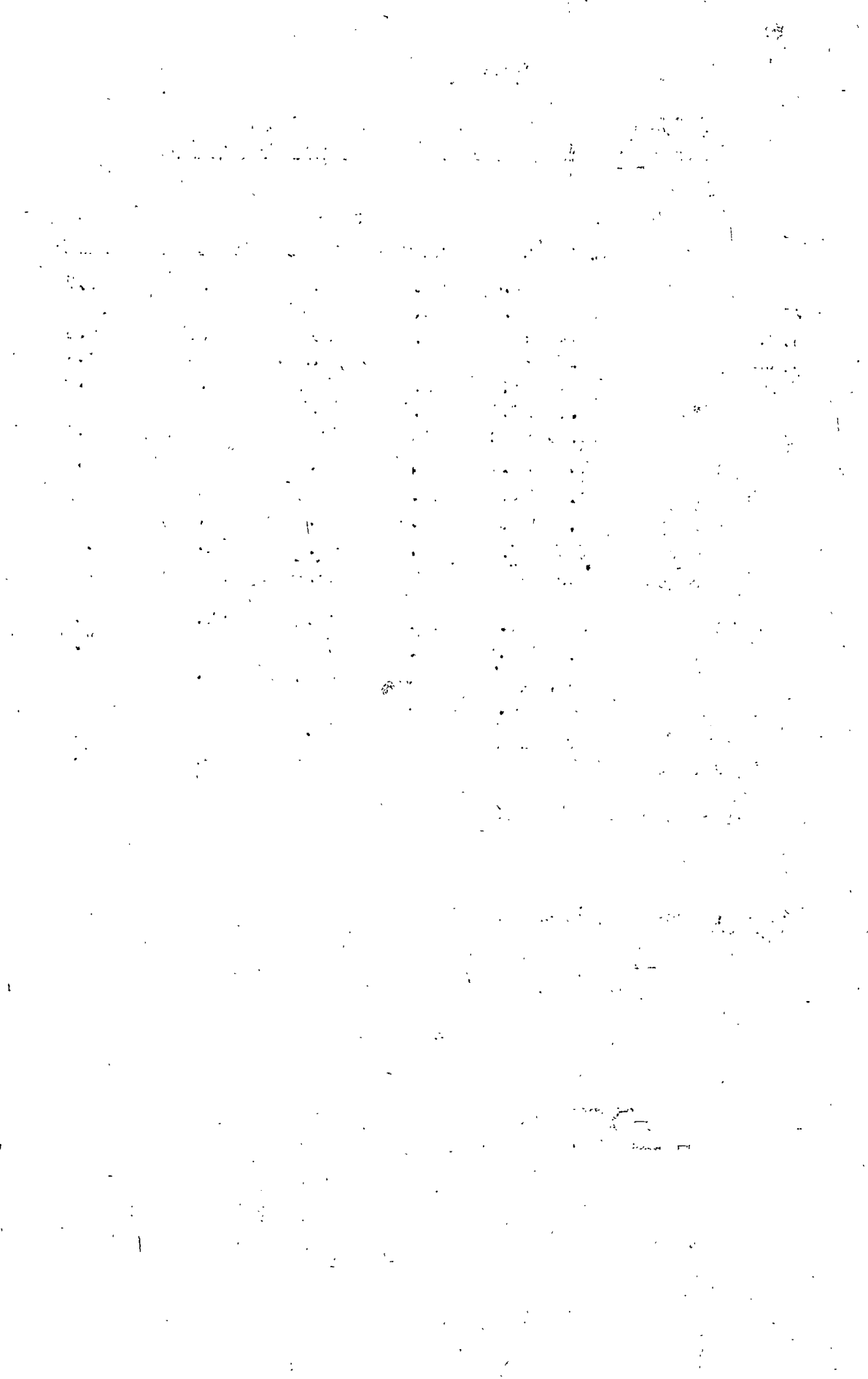
TABLE 23

INDEX NUMBERS OF RETAIL PRICES, RENTS AND
COSTS OF SERVICES ON THE 1926 BASE - 1929 - 1936

| <u>Year</u> | <u>Food
Index</u> | <u>Fuel
Index</u> | <u>Rent
Index</u> | <u>Clothing
Index</u> | <u>Sundries
Index</u> | <u>Total
Index</u> |
|-----------------|-----------------------|-----------------------|-----------------------|---------------------------|---------------------------|------------------------|
| 1929 | 101.0 | 96.4 | 103.3 | 96.9 | 99.0 | 99.9 |
| 1930 | 98.6 | 95.7 | 105.9 | 93.9 | 99.4 | 99.2 |
| 1931 | 77.3 | 94.2 | 103.0 | 82.2 | 97.4 | 89.6 |
| 1932 | 64.3 | 91.4 | 94.7 | 72.3 | 94.6 | 81.4 |
| 1933 | 63.7 | 87.7 | 85.1 | 67.1 | 92.6 | 77.5 |
| 1934 | 69.4 | 87.7 | 80.1 | 69.7 | 92.1 | 78.6 |
| <u>1935</u> | <u>70.4</u> | <u>86.8</u> | <u>81.3</u> | <u>69.9</u> | <u>92.2</u> | <u>79.1</u> |
| January | 68.8 | 88.7 | 80.3 | 70.2 | 92.0 | 78.6 |
| May | 68.7 | 85.8 | 81.4 | 70.0 | 92.0 | 78.6 |
| September | 70.9 | 85.3 | 81.4 | 69.6 | 92.5 | 79.2 |
| December | <u>73.7</u> | <u>87.1</u> | <u>82.6</u> | <u>69.9</u> | <u>92.1</u> | <u>80.4</u> |
| Average | 70.4 | 86.8 | 81.3 | 69.9 | 92.2 | 79.1 |
| <u>1936 (1)</u> | <u>73.4</u> | <u>86.6</u> | <u>83.7</u> | <u>70.5</u> | <u>92.1</u> | <u>80.6</u> |
| January | 73.9 | 87.2 | 82.6 | 69.3 | 91.9 | 80.4 |
| May | 71.3 | 87.2 | 83.8 | 70.2 | 92.1 | 80.0 |
| September | 75.1 | 86.1 | 83.8 | 70.6 | 92.2 | 81.1 |
| December | <u>75.3</u> | <u>86.7</u> | <u>84.9</u> | <u>71.6</u> | <u>92.3</u> | <u>81.7</u> |
| Average | 73.4 | 86.6 | 83.7 | 70.5 | 92.1 | 80.6 |

(1) Subject to revision.

Source: Canada Year Book, 1937 - P. 796



DISTRIBUTION OF EARNINGS BY FAMILY INCOME GROUPS

Table 24 shows clearly the extent to which family income has fallen in the interval from 1931 to 1936. The number of families considered fell from 36,357 in 1931 to 35,036 in 1936, while total earnings declined by 11,838,500.

There was an increase of 2,315 families or heads of families reporting 'no earnings' in 1936. There was also an increase in the number of families falling within the two lowest income classes - an increase of 643 in the \$1 - 449 class and an increase of 1,269 in the earnings group \$450 - 949. The number of families appearing in the higher income groups declined sharply, causing the variations on either side of the middle income class to assume a high degree of symmetry.

The only income group in which the total earnings for 1936 were greater than those in 1931 was the class \$450 - 949. A slight decrease is evident in the class from \$1 - 449, and a much greater decline in the higher income groups.

The total number of children fell by 7,598 in 1936. The number of children within each income group has naturally corresponded closely with the movement of wage-earners' families down the income scale. It is evident that in addition to suffering from lowered total earnings, the families in the lower income groups have a greater number of dependents than those with larger earnings.

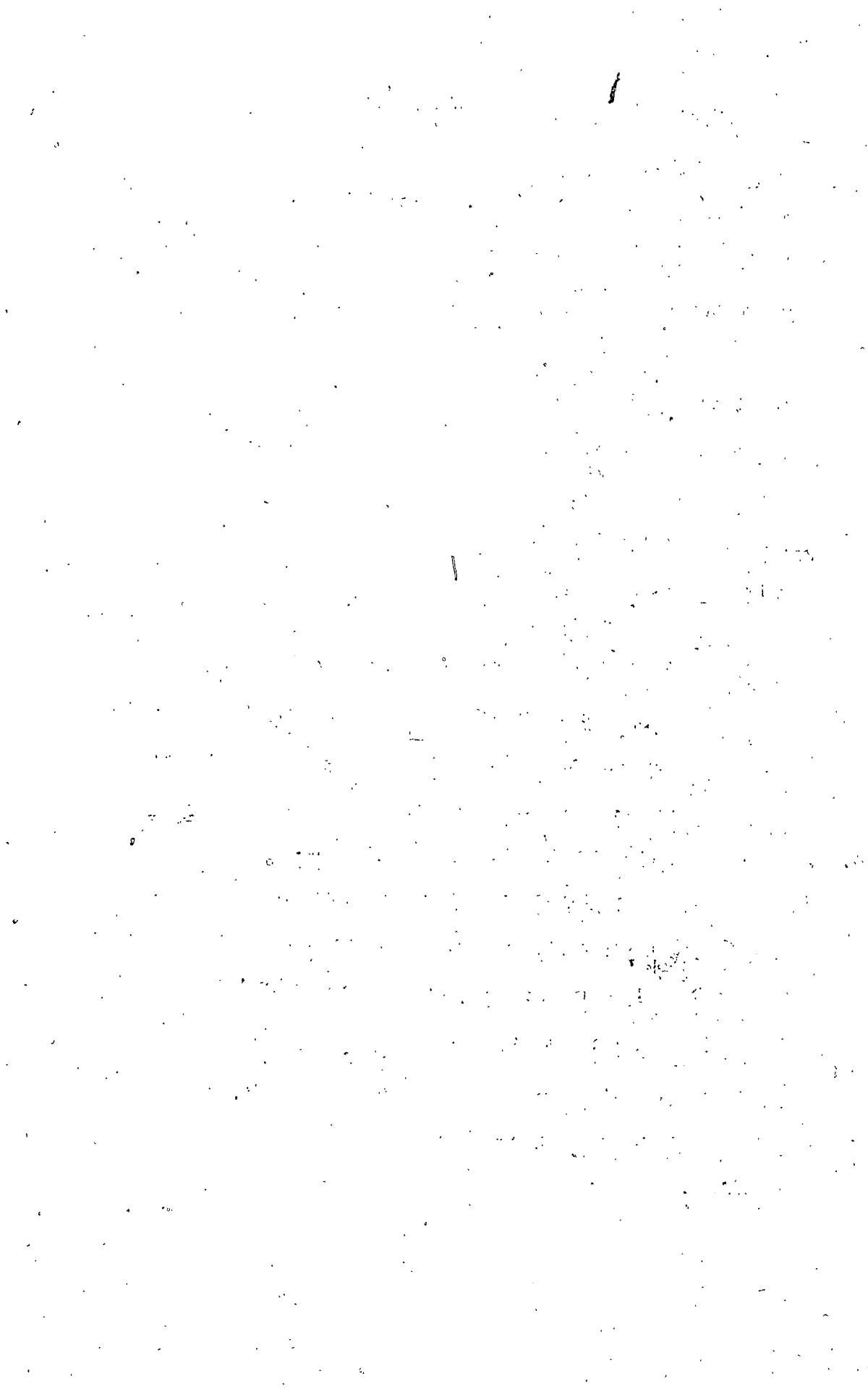


TABLE 24

FAMILY EARNINGS IN 1936 COMPARED WITH SIMILAR DATA FOR 1931.

| | Families or Heads | | Earnings of Heads | | Persons in Family (1) | | Total Children (2) | | Total Children Gainfully Occupied | |
|----------------|-------------------|--------|-------------------|--------------|-----------------------|---------|--------------------|--------|-----------------------------------|-------|
| | 1931 | 1936 | 1931 | 1936 | 1931 | 1936 | 1931 | 1936 | 1931 | 1936 |
| Total | 36,357 | 35,036 | \$51,699,200 | \$39,860,700 | 136,126 | 130,217 | 64,662 | 57,064 | 12,198 | 7,065 |
| No Earnings | 1,238 | 3,553 | - | - | 4,622 | 13,394 | 2,267 | 7,075 | 551 | 628 |
| \$ 1 - 449 | 4,509 | 5,152 | 1,157,800 | 1,132,000 | 16,428 | 18,718 | 7,777 | 8,146 | 1,391 | 874 |
| 450 - 949 | 6,360 | 7,629 | 4,457,500 | 5,446,500 | 24,164 | 28,015 | 11,775 | 12,125 | 2,150 | 1,504 |
| 950 - 1,449 | 9,362 | 9,290 | 11,073,300 | 10,789,000 | 35,640 | 34,584 | 17,170 | 15,111 | 3,322 | 2,140 |
| 1,450 - 1,949 | 6,455 | 4,432 | 10,741,800 | 7,370,700 | 23,886 | 16,083 | 11,107 | 6,782 | 2,231 | 933 |
| 1,950 - 2,949 | 4,484 | 2,854 | 10,338,200 | 6,639,900 | 16,451 | 11,533 | 7,508 | 4,467 | 1,427 | 598 |
| 2,950 - 4,949 | 2,201 | 1,301 | 7,731,500 | 4,651,000 | 8,329 | 4,815 | 3,912 | 2,037 | 588 | 240 |
| 4,950 and over | 830 | 512 | 6,199,100 | 3,831,600 | 3,166 | 1,918 | 1,496 | 823 | 186 | 71 |
| Not stated | 918 | 313 | - | - | 3,440 | 1,157 | 1,650 | 498 | 352 | 77 |

(1) In 1931, adult dependent relatives were included as members of family, while in 1936, only parents and children were considered as members of family.

(2) In 1936, "children" means children 24 years and under.

FAMILY EARNINGS BY AGE GROUPS

In the two preceding sections we discussed the distribution of income by income groups in the years 1931 and 1936.

We turn now to an analysis of income distribution among the families of Winnipeg in 1936 on the basis of age groupings.

Table 25 which represents in a condensed form the findings of the 1936 census with regard to family earnings, discloses several interesting facts:

1. The greatest concentration of families occurs within the age groups 35-44 and 45-54. This fact is clearly brought out in column 2 which shows the percentage distribution of families by age groups.

2. Although the age groups mentioned above contain the greatest number of families, it is within the youngest group that the percentage of families on relief is highest. Almost 26 per cent of the families in the age group "under 25" are on relief.

3. The highest incomes occur in the age groups 35-44 and 45-54. This is illustrated in column 7, which shows the proportion of family heads earning less than \$950 within each age group. It will be noted that 76.85 per cent of the family heads "under 25" earned less than \$950. This compares with 31.91 per cent in the case of the group 35-44 and 31.98 per cent in the group 45-54.

4. Column 10 shows the percentage distribution of children between families earning less or more than \$950 within each age group. As is to be expected the percentages shown in this column vary quite closely with those of column 7. It is, however, to be noted that in each age group except the youngest "under 25" and the oldest "70 and over", there are relatively more children to be found in those families earning less than \$950. For example, within the age group 35-44, 31.91 per cent of the families earn less than \$950, but account for 37 per cent of the children belonging to all the families in that age group.

5. The families falling within the age group 45-54 have the highest average annual earnings, amounting to \$1,455.18. They also have the greatest number of dependents, as is indicated by columns 11 and 13, which show the average number of persons per family. These columns show that the families within this age group contained an average of 2.05 children.

TABLE 25.

EARNINGS OF FAMILIES BY AGE AND INCOME GROUPS
WINNIPEG - 1936

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|-------------------|-----------------------------------|---------------------------------|----------------------------------|--|-----------------------------------|--|
| Age Group | Percent-
age Dis-
tribution | Number
of Heads
on Relief | Percent
of Heads
on Relief | Number
of Heads
not on
Relief | Percent-
age Dis-
tribution | Percent
of Heads
Earning
less than
\$950 |
| Under 25 years | 2.64 | 239 | 25.61 | 687 | 2.25 | 76.85 |
| 25 - 34 years | 22.70 | 1,370 | 17.23 | 6,579 | 21.51 | 45.11 |
| 35 - 44 years | 26.35 | 1,265 | 13.70 | 7,964 | 26.03 | 31.91 |
| 45 - 54 years | 30.00 | 1,006 | 9.57 | 9,500 | 31.06 | 31.98 |
| 55 - 64 years | 15.74 | 484 | 8.77 | 5,032 | 16.45 | 35.19 |
| 65 - 69 years | 1.99 | 72 | 10.32 | 625 | 2.04 | 49.92 |
| 70 years and over | .53 | 1 | .49 | 203 | .66 | 37.43 |

| (8) | (9) | (10) | (11) | (12) | (13) |
|--|--|---|--|---------------------------------|--|
| Number of
Children
in Families
whose head
earns less
than \$950 | Number of
Children
in Families
with Heads
earning less
than \$950 | Percent of
Children
in Families
with Heads
earning less
than \$950 | Average
number of
persons
in Families | Average
Earnings
per Head | Average
Number of
Children
per Family |
| 335 | 257 | 76.71 | 2.48 | \$645.56 | .49 |
| Under 25 years | 3,202 | 49.30 | 2.97 | 988.93 | .98 |
| 25 - 34 years | 5,330 | 37.11 | 3.79 | 1,306.69 | 1.80 |
| 35 - 44 years | 6,630 | 34.06 | 4.13 | 1,450.16 | 2.05 |
| 45 - 54 years | 2,404 | 37.31 | 3.72 | 1,423.29 | 1.32 |
| 55 - 64 years | 193 | 54.21 | 3.11 | 1,256.80 | .56 |
| 65 - 69 years | 16 | 30.00 | 2.53 | 1,782.27 | .29 |
| 70 years & over | | | | | |

Note:—The figures in columns 7 to 13 are for families not on relief.

The decline of incomes in Winnipeg may be further analyzed from the point of view of the reduction which has taken place in income tax assessments and collections in Manitoba during recent years. As the incidence of the income tax is largely non-agricultural, the major part of income tax assessments and collections in Manitoba are centred in the city of Winnipeg.

Table 27 shows the distribution of income tax assessments as between Ontario, Quebec and Manitoba from 1928 to 1936. It will be noted from this table that income assessment in Ontario declined from 554 million dollars in 1929 to 428.3 million dollars in 1934, the low point for the years covered. This represented a decline of almost 23 per cent.

It will be noted further that income tax assessment in Ontario constituted 46.34 per cent of the total Canadian assessment in 1929, and 51.65 per cent of total assessments in 1934. In other words, income tax assessments in Ontario, while suffering an absolute decline, increased, relative to Canada as a whole, between 1929 and 1934. On the other hand, the years 1934 to 1936 witnessed an absolute increase from 428.3 million dollars to 501.9 million dollars; despite this, Ontario's share in the total Canadian assessment declined 46.76 per cent in 1936.

In the province of Quebec, income assessment declined from 342.2 million dollars in 1929 to 179.8 million dollars in 1934, or a decline of 47.5 per cent. In the year 1929 income assessment in Quebec constituted 28.63 per cent of the total Canadian assessment, falling to 21.68 per cent in 1934. Thus, the decline in income assessment in Quebec was relatively slight between 1929 and 1934 in respect to the percentage of total Canadian assessment. What is of

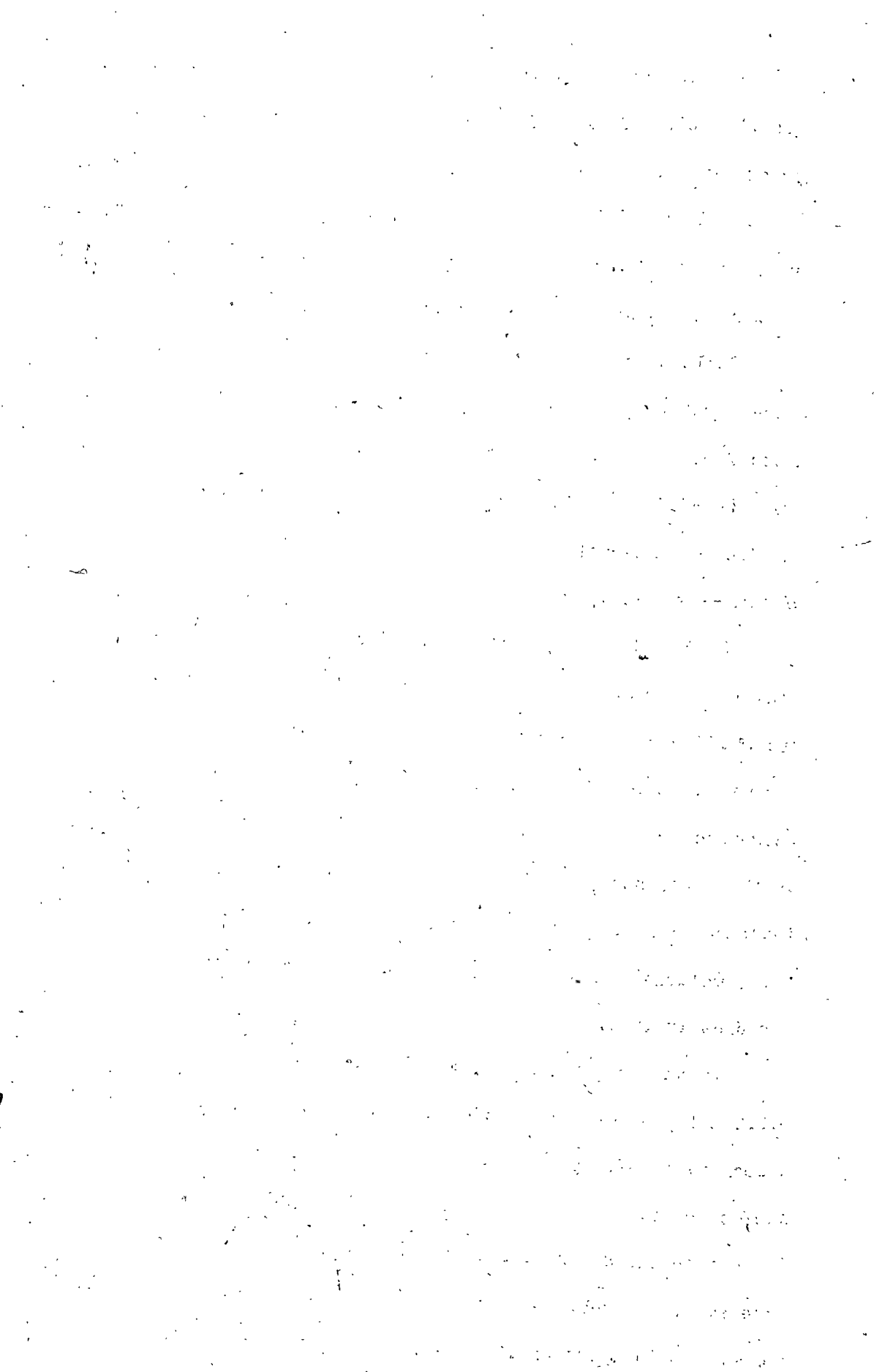


TABLE 26

DISTRIBUTION OF INCOME TAX COLLECTIONS
COMPARED WITH POPULATION DISTRIBUTION - MANITOBA, ONTARIO, QUEBEC

| | Income
Tax
Collected
Ontario | Per
Cent
of Canadian
Total | Income
Tax
Collected
Quebec | Per
Cent of
Canadian
Total | Income
Tax
Collected
Manitoba | Per
Cent of
Canadian
Total | Total
Canada |
|------|---------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--|-------------------------------------|-----------------|
| 1928 | 25.6 | 45.23 | 19.0 | 33.57 | 3.1 | 5.47 | 56.6 |
| 1929 | 28.7 | 48.32 | 19.8 | 33.33 | 3.3 | 5.56 | 59.4 |
| 1930 | 33.1 | 47.97 | 23.3 | 33.77 | 3.7 | 5.36 | 69.0 |
| 1931 | 34.7 | 48.87 | 23.1 | 32.54 | 3.5 | 4.93 | 71.0 |
| 1932 | 30.3 | 49.43 | 20.7 | 33.77 | 2.2 | 3.59 | 61.3 |
| 1933 | 30.7 | 49.44 | 21.5 | 34.62 | 2.1 | 3.38 | 62.1 |
| 1934 | 31.5 | 51.30 | 20.2 | 32.90 | 1.9 | 3.09 | 61.4 |
| 1935 | 35.9 | 53.74 | 20.5 | 30.69 | 1.9 | 2.84 | 66.8 |
| 1936 | 45.1 | 54.53 | 25.2 | 30.47 | 2.2 | 2.66 | 82.7 |

Percent-
age distri-
bution of
population
in 1931

33.07

27.70

6.75

TABLE 27

DISTRIBUTION OF INCOME TAX ASSESSMENTS
COMPARED WITH POPULATION DISTRIBUTION - MANITOBA, ONTARIO, QUEBEC

| | Income
Assess-
ment
Ontario | Per
Cent of
Canadian
Total | Income
Assess-
ment
Quebec | Per
Cent of
Canadian
Total | Income
Assess-
ment
Manitoba | Per
Cent of
Canadian
Total | Total
Canada
Assess-
ment |
|------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|------------------------------------|
| 1928 | 501.7 | 48.23 | 247.1 | 23.76 | 73.0 | 7.02 | 1,040.2 |
| 1929 | 554.0 | 46.34 | 342.2 | 28.63 | 69.1 | 5.78 | 1,195.4 |
| 1930 | 599.7 | 45.25 | 402.1 | 30.34 | 83.7 | 6.32 | 1,325.2 |
| 1931 | 634.2 | 46.24 | 374.9 | 27.34 | 84.0 | 6.12 | 1,371.5 |
| 1932 | 508.4 | 51.22 | 234.3 | 23.60 | 56.6 | 5.70 | 992.6 |
| 1933 | 448.1 | 47.46 | 259.6 | 27.50 | 53.8 | 5.70 | 944.1 |
| 1934 | 428.3 | 51.65 | 179.8 | 21.68 | 45.0 | 5.43 | 829.3 |
| 1935 | 449.9 | 48.45 | 274.0 | 29.51 | 47.1 | 5.07 | 928.6 |
| 1936 | 501.9 | 46.76 | 357.5 | 33.31 | 46.8 | 4.36 | 1,073.4 |

Percent-
age distri-
bution of
Population
in 1931

33.07

27.70

6.75

significance, however, in the case of Quebec, is the increase in income tax assessments between 1934 and 1936, an increase from 179.8 to 357.5 million dollars. In other words, the income tax assessment in the province of Quebec has practically doubled between 1934 and 1936.

In Manitoba, income tax assessments fell from 69.1 million dollars in 1929 to 45.0 million dollars in 1934. This represents a decline of 35 per cent.

In 1929 Manitoba's income tax assessment constituted 5.78 per cent of total Canadian assessment as compared with 5.43 per cent in 1934. It will be noted, however, that income assessment in Manitoba increased from 45.0 million dollars in 1934 to 46.8 million dollars in 1936, or an increase of only 4.0 per cent, and that within the same period Manitoba's share of the total assessment declined from 5.43 per cent to 4.36 per cent.

The situation may be more practically considered from the standpoint of income tax collections in Ontario, Quebec, Manitoba and Canada. (Table 26).

In 1929 income tax collections in Ontario amounted to 28.7 million dollars. At no time in recent years have income tax collections in Ontario fallen below this level; on the other hand, they actually increased from 28.7 million dollars to 31.5 million dollars between 1929 and 1934. During the same period, Ontario's share of total income tax collected in Canada increased from 48.3 per cent to 51.3 per cent.

In Quebec in 1929 income tax collections amounted to 19.8 million dollars and in each year since 1929 income tax collections exceeded this amount.

In contrast to the situation with respect to Ontario and Quebec, income tax collections in Manitoba declined from 3.3 million dollars in 1929 to 1.9 million dollars in 1934, or a decline of 57.5 per cent.

In 1929 income tax collections in Manitoba constituted 5.56 per cent of total collections in Canada, as compared with 3.09 per cent of total collections in Canada in 1934.

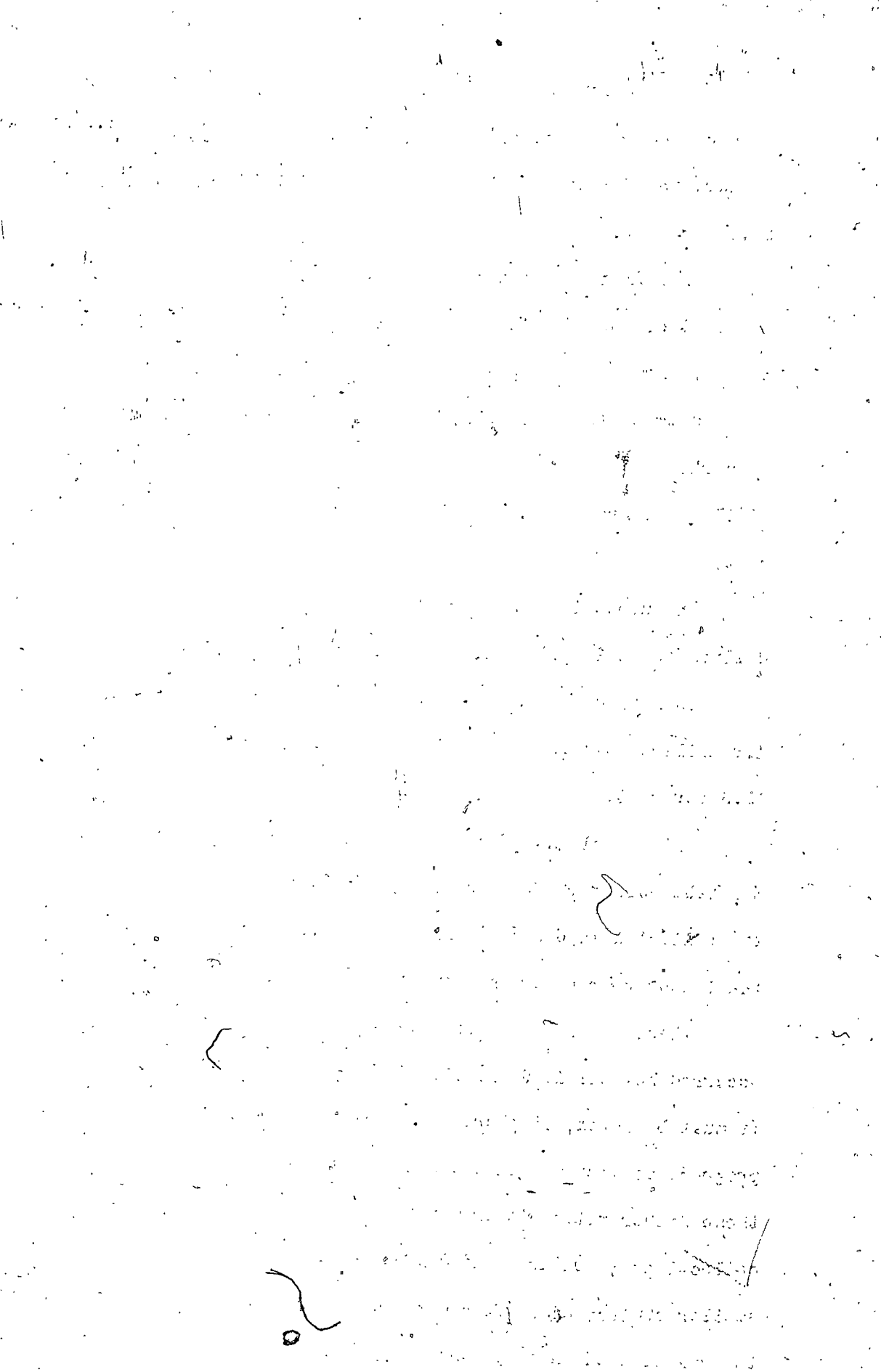
Between 1934 and 1936, a period of economic recovery in Canada as a whole, income tax collections in Ontario increased from 31.5 million dollars to 45.1 million dollars, or an increase of 43.2 per cent.

In Quebec income tax collections increased from 20.2 million dollars to 25.2 million dollars, or an increase of 25 per cent.

In Manitoba, however, income tax collections increased from 1.9 million dollars to 2.2 million dollars, or an increase of only 13.6 per cent.

While a slight increase occurred in income tax collections in Manitoba during 1934 to 1936, Manitoba's percentage of total income tax collected in Canada declined from 3.09 per cent to 2.66 per cent, the latter year being the lowest since 1928.

These figures are sufficient to show the sharp decline which occurred between 1929 and 1934 in incomes liable to income taxation. It must be noted, of course, that from 1929 onwards there was a progressive increase in the rates of taxation upon incomes in Canada; those higher rates either maintained or increased income tax collections in Ontario and Quebec, while in Manitoba they brought smaller collections. This was true despite the fact that the income tax was widened in scope and exemptions cut down throughout the depression.



If the data presented above are considered in conjunction with the earnings of wage-earners who, in the main do not come within the scope of the Federal Income tax, it will be seen that the great majority of income recipients in Winnipeg have suffered a tremendous loss of income since 1929.

Another factor worthy of note is that the higher rates of income tax, as applied by the Dominion government between 1929 and 1935, have brought less and less in tax collections in Manitoba, suggesting clearly the limits involved in respect to securing governmental revenue by means of increasing taxation, and particularly in the field of income tax.

Manitoba has never paid its share of the Dominion income tax measured upon a population basis. In 1931 Manitoba had 6.5 per cent of the population of Canada and paid 4.93 per cent of the Dominion income tax. In 1936, with probably a slightly smaller share of the Dominion population, Manitoba contributed only 2.66 per cent of total Dominion income tax collections. This situation is explained by the fact that Manitoba contains a large agricultural population which does not figure to any large extent in income tax returns; on the other hand, the head offices of many large corporations which do business on a Canadian-wide basis are situated in Ontario and Quebec. However, the fact remains that the shrinkage of income tax returns on an absolute basis, and on a population basis, in Manitoba, gives a clear picture of the trend of earnings in this province and especially in the city of Winnipeg.

PART IVCAUSES OF THE DECLINE OF EMPLOYMENT
AND EARNINGS IN WINNIPEG

The logical question which may be asked in view of the foregoing facts is: "What is the cause, or what are the causes, of the present employment situation in the city of Winnipeg? While this question cannot be answered with finality, it is possible, however, to discuss a number of factors which bear upon the employment situation in Winnipeg. These factors are:

1. The decline of income in Canada. In 1929 the net value of total production in Canada amounted to \$6,312,556,000. By 1933 the net value of total production in Canada had declined to \$3,193,300,000, or to about one-half its 1929 level. This slowing down of production, combined with declining price levels during those years, had the effect of restricting employment and driving private incomes down. The prevailing trends in Canada, even though western income had been maintained, would have had some effect upon employment in the city of Winnipeg.

2. Of greater relative importance to Winnipeg, however, has been the decline in incomes in the prairie provinces. The following table shows the net value of production in Manitoba, Saskatchewan and Alberta from 1929 to 1935:

TABLE 28

| <u>Year</u> | <u>Manitoba</u> | <u>Saskatchewan</u> | <u>Alberta</u> | <u>Total</u> |
|-------------|-----------------|---------------------|----------------|---------------|
| 1929 | \$311,052,000 | \$332,195,000 | \$345,949,000 | \$989,196,000 |
| 1930 | 266,607,000 | 258,329,000 | 329,791,000 | 854,727,000 |
| 1931 | 203,894,000 | 153,810,000 | 272,425,000 | 630,129,000 |
| 1932 | 168,687,000 | 163,966,000 | 228,719,000 | 561,372,000 |
| 1933 | 160,427,000 | 137,838,000 | 207,184,000 | 505,449,000 |
| 1934 | 190,893,000 | 164,397,000 | 256,210,000 | 611,500,000 |
| 1935 | 172,028,000 | 189,725,000 | 225,927,000 | 587,680,000 |

As shown in the foregoing table the net value of production in the three prairie provinces declined from 989 million dollars in 1929 to 505 million dollars in 1933. There has since been some recovery but not sufficient to offset the tremendous decline since 1929. These figures indicate the effect of the decline of income in the prairie provinces upon the business activity of a city fundamentally interested in distributive processes.

3. Of immediate importance, and a factor of considerable weight in establishing the economic position of Winnipeg, has been the decline in income in the province of Manitoba, which as shown in the foregoing table declined from \$311,000,000 in 1929 to \$160,000,000 in 1933 with some recovery since that time.

4. The declines in income in Canada, in the prairie provinces and in Manitoba, have all weighed upon the volume of employment in the metropolitan area of Winnipeg.

5. Or the picture might be analyzed from another standpoint, that of the value of retail sales in the prairie provinces which would reflect in a substantial measure the volume of business done in Winnipeg in its capacity as a large distributing centre. During the years 1924-1929 the average value of retail sales in the prairie provinces was slightly over \$600,000,000. This figure fell by an annual average of \$200,000,000 during the period 1930-1936.

The foregoing points all deal with the extent of the decline of income in various spheres which have affected national and regional incomes in Canada and which have materially weighed upon employment and incomes in the city of Winnipeg; again bearing in mind, of course, the essential position which the transportation, trade and service industries occupy in the economic life of the city.

6. It is a well known fact that technological improvements have been taking place in Canada as well as in other countries during the past twenty-five years. The net result of this fact is that the productivity of labour has been greatly increased. Fewer people can be responsible for more production than at any time in the past. This development received an impetus during the depression with declining price levels and restricted outlets for goods and services. Industry in all its branches in Canada, to maintain in some cases profitable operations, and in other cases to remain solvent, endeavoured in every possible way to reduce costs. Adversity increased efficiency throughout the depression and gave an impetus, to cite one example, to the installation of labour-saving machines or machines designed to increase output and lower costs.

With improved conditions in Canada generally, with markets slowly expanding, industry was able to increase its operations without a proportionate increase in employment.

In dealing with the employment situation in Winnipeg, although the above remarks are probably less applicable to Winnipeg than most other cities, the short time effects of technological improvement must be recognized in dealing with the volume of employment.

The Dominion Bureau of Statistics in its report on the manufacturing industry of Canada, 1935, states:

"The progressively increasing use of machinery and the rise in the power installed per wage-earner, tend to increase the employee's output... Thus, while the reported wage-earners in 1935 had increased 6.8 per cent from the number in 1923, the volume of production is estimated to have increased 30.2 per cent in the same period".

".....the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners, by better organization and the use of improved equipment".

7. The employment situation in Winnipeg cannot be divorced from the internal problems which have been created in Manitoba, both provincially and municipally, through the increasing burdens of taxation. Bluntly stated, the position has been reached in Manitoba where in relation to income, taxation is the heaviest in Canada, with the exception of Saskatchewan, which has been disastrously affected by drought.

It is not necessary to go beyond the evidence presented to the Royal Commission on Dominion-Provincial relations to amply prove this assertion. In its submission to the Dominion-Provincial Commission, the Manitoba government presented its debt position in terms of income, as shown in the following table:

TABLE 29

Overlapping Debt of Provinces as a Percentage of Income

| Province | 1926
% | 1929
% | 1931
% | 1933
% |
|----------------------------|-----------|-----------|-----------|-----------|
| Prince Edward Island | 9.45 | 13.45 | 35.86 | 39.14 |
| Nova Scotia | 28.75 | 32.55 | 50.69 | 72.81 |
| New Brunswick | 30.59 | 42.34 | 71.92 | 97.71 |
| Quebec | 25.63 | 24.20 | 43.22 | 66.97 |
| Ontario | 25.51 | 24.45 | 43.57 | 58.10 |
| Manitoba | 34.70 | 41.99 | 72.85 | 97.81 |
| Saskatchewan | 16.38 | 27.48 | 86.04 | 101.89 |
| Alberta | 25.39 | 41.50 | 60.68 | 79.93 |
| British Columbia | 29.79 | 31.24 | 63.01 | 79.90 |
| All provinces | 25.80 | 27.73 | 50.04 | 68.76 |
| Total Canadian Public Debt | 71.46 | 66.76 | 113.63 | 155.77 |

In regard to the above figures, the Manitoba brief stated:

"It is of interest to consider the position of Manitoba. In 1926, while its provincial debt alone was only 11.50 per cent, its overlapping indebtedness was 35 per cent of the income of the people of the province in that year. By 1931 the combined provincial and municipal indebtedness of Manitoba, largely as the result of the decline in

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"income, was 72 per cent of the total income of the people of the province. This was again about 50 per cent above the average for all provinces and was exceeded only by Saskatchewan. In 1933 the provincial and municipal indebtedness of Manitoba was 98 per cent, almost equal to the annual income in that year, and a lower level than was reached by any of the provinces excepting Saskatchewan and Prince Edward Island. For Saskatchewan the corresponding figure for the relation of overlapping indebtedness to income was 102 per cent; the New Brunswick figure was equal to that of Manitoba. Outside of these three provinces, the ratio of indebtedness to income in 1933 was 80 per cent for Alberta and British Columbia; about 70 per cent for Quebec and Nova Scotia, as well as for all Canada, 58 per cent for Ontario, which was substantially below the Dominion average; and 39 per cent for Prince Edward Island".

From a consideration of debt we may pass to an analysis of taxation in relation to income. The Manitoba brief contains the following remarks in this respect:

"From 1926 to 1933 the share of the national income of Canada absorbed by provincial and municipal taxes combined was doubled, the increase being from 5.11 to 10.34 per cent. In Manitoba, as the result of the great decline in incomes, the percentage of income required for overlapping taxes increased from 6.37 in 1926 to 14.36 in 1933. This percentage was higher than for any other province, although it was exceeded by Saskatchewan from 1928 to 1932. Due to the decline in income of her people the proportion of income required for provincial and municipal taxation in Manitoba in 1933 was almost 40 per cent above the average for all Canadian provinces. In the central provinces, taxation required slightly over 10 per cent of the income; in the maritime provinces, slightly over 8 per cent, except in Prince Edward Island, where the amount was considerably less".

The essential question in regard to taxation in Manitoba in relation to this analysis is the effect of that taxation upon employment and the possibilities of employment in the province of Manitoba. The following fact stands out clearly. Canada, from an industrial or business viewpoint is a unit made up of nine provinces. If development within each province is to be shared on the basis of natural resources and advantages, certain common standards must

prevail in respect to the costs under which industry or business must operate. It is, therefore, not possible for any one province, including the municipalities, to impose taxation on a basis which is higher than that imposed in other provinces without creating an important barrier in respect to progress and development. With provincial and municipal taxation taking 14.36 per cent of provincial income in Manitoba in 1933 as compared with 10.07 per cent in Ontario, 10.63 per cent in Quebec and 10.12 per cent in British Columbia, it is only natural that economic development should proceed more rapidly in the latter three provinces than in Manitoba.

There are evidences that taxation levels in Manitoba, and consequently in Winnipeg, have reached the point where they are not only an important factor in preventing the normal development of the province and the city, but causing a slow disruption of development to date. These evidences are found in the loss of population, the emigration particularly of large numbers of male wage earners, lack of opportunity for young people and their emigration from the city of Winnipeg and from the province, the continuance of a high level of unemployment and the lethargic condition of the construction industry as the result of the burden of taxes which are now laid upon property.

8. The present employment situation in Winnipeg cannot be separated from the effects produced upon western Canada by federal fiscal and monetary policies during the depression. These policies, whatever their virtue for other parts of Canada, bore heavily upon western Canada and restricted purchasing power in the main area which Winnipeg serves. Any policies, which bear too heavily upon the west cannot but affect unemployment in the west's largest urban centre.

9. Another cause of the present employment situation in Winnipeg is the inability of municipal and provincial governments to undertake developmental work. The struggle of public bodies to balance budgets and meet their obligations incurred in other days as well as the burden of unemployment relief, in the main, take all the funds which taxpayers can provide. Governmental funds are not available today as in the past for departmental work which would enlarge individual opportunity. Thus has employment been more dependent than ever upon private initiative, which has in turn been dulled by the governmental debt and taxation position.

THE OUTLOOK OF EMPLOYMENT IN MANITOBA

The data presented in this report conclusively show that employment conditions in Manitoba are not satisfactory and are at a lower ebb than in other provinces for which comparisons are available. The outlook for employment in Manitoba may be related to certain basic factors. The first of these is that population growth in western Canada will likely be relatively slow in the coming years. In fact, it is inevitable that large areas in western Canada will continue to lose population for some time to come.

Further agricultural development in western Canada will likely come very slowly and the employment in Manitoba which was a result of the rapid growth and expansion of the prairie provinces cannot be counted on in the immediate future. Probably the best that can be hoped for, from an employment standpoint in Manitoba, will be the results that will accrue from a slow improvement in the economic position of established agriculture in the prairie provinces. From an industrial standpoint, Manitoba must face the basic fact that the once important factor in employment, namely, the construction of railroads and other capital goods has for some time in the future been completed.

From the standpoint of employment of casual labour Manitoba has had little to provide for those who were generally employed in a large way in railroad construction. Highway construction can, at best, absorb only a small part of the labour which, in other years, was identified with the railroad construction, and which remains within the community largely as unskilled labour.

The great need in Manitoba is the creation of some new incentives for production or new developments which will provide avenues of employment. This new incentive may be found in part, but only to a limited extent, in the intensification of agricultural production in some areas in Manitoba. The important field for increased employment in Manitoba lies in the acceleration of the development of the natural resources of the province, and particularly, the natural resources of northern Manitoba. Within the limits of its resources the Department responsible for these developments is doing excellent work, but it is regrettable that a larger share of existing revenues cannot be devoted to the work of developing the new wealth which lies in the northern area of the province.

While manufacturing is making some progress in Manitoba, greater expansion in efficient industries could take place to the benefit of the province as a whole. This expansion could be furthered by an active interest on the part of the Government of Manitoba, and perhaps, the city of Winnipeg, in giving very serious consideration to the many pressing problems which are confronted by industries now located in Manitoba, or which seek to establish themselves within the province. Dependence on eastern industry for manufactured goods deprives Manitoba of local employment opportunities. In addition, those organizations which are engaged in retailing and wholesaling in western Canada, and especially those organizations in this field which are owned and controlled in eastern Canada, have an inherent responsibility to the western

provinces which have throughout the years contributed so largely to their prosperity. It is not unreasonable to expect that these organizations should insofar as possible relate their buying and merchandising policies to the welfare of the area in which they are operating, especially when it is recognized that their own welfare depends upon a reversal of current economic trends in the province of Manitoba, and the other prairie provinces.

Practically all states in the United States and all provinces of Canada are endeavoring by every means at their disposal to increase employment and the well being of their people through increased tourist revenues. The tourist business is a new industry which has reached tremendous proportions in many parts of Canada and in many States across the line. It is an industry which has meant a considerable measure of economic development even in spite of the depressed conditions of the past six or seven years. The tourist business, properly cultivated, means a large measure of employment across all sections of the province and is possibly the point at which the Government of Manitoba could take immediate and practical steps to improve the general employment outlook.

In these fields lie the basis for a new incentive for the province and for the people of Manitoba, and the resources of the province should be mobilized from these several different angles in the hope of lifting Manitoba from the economic despondency which has characterized the province since 1930.

It may be argued of course that developmental work requires money, but the funds required for this work must be weighed against the social and economic loss which is being sustained as a result of continued large-scale unemployment, reduced incomes in all sections of the community and the staggering costs of unemployment relief.

The time has arrived when Manitoba, and presumably other provinces in Canada, must direct at least a part of the public funds which are now devoted to the maintenance of people in idleness, into provincial developments which will result in work and productive employment.

The federal government, the provincial government and the municipalities in Manitoba have spent over sixty million dollars in unemployment relief within the province, and after the expenditure of this vast amount of public money the province has fewer people in gainful employment than when this vast public expenditure was initiated. Surely, this in itself, demonstrates the futility of past policies in dealing with lack of employment and clearly indicates the importance of governmental policy in respect to unemployment being re-directed, in part at least, to the economic development of the province.